FIELD TEST · NOVEMBER 2026

Same visits, different numbers: 15 analytics tools against a known truth

A field test of web and product analytics: what each tool counted, what its dashboard and its AI assistant server answered, and where the numbers part from what really happened.

Tools: Privatrak, Google Analytics 4, Plausible, Pirsch, Matomo Cloud, PostHog, Mixpanel, Amplitude, Microsoft Clarity, Mouseflow, Sentry, LogRocket, Cloudflare Web Analytics, Fathom, Umami Cloud

Visits: 122 scripted visits by 46 simulated visitors over four days (17 to 20 Nov 2026), 4 visits from real devices, and a round of AI assistant, AI agent and phone-app visits

Tests: delivery and counting · ten questions in every dashboard · the same ten questions through every tool's MCP server, with two models · all-days read-out · server-side reporting of AI fetchers · page weight · product features from vendor docs

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Disclosure: Privatrak is our own product and one of the fifteen tools. It was given the same questions, the same scoring and the same ground truth as every other tool, and its gaps are reported like everyone else's. Chapter 3 says what that does and does not protect against.

Abstract

Analytics tools disagree about the same website, and it is usually impossible to say which one is right, because nobody knows what really happened on the site. We built a site where we do know. Fifteen web and product analytics tools were installed side by side on one small static website, each with its standard snippet and its defaults. We then drove 122 scripted visits to it from 46 simulated visitors ("personas"), each with a known browser, network, country, consent choice and path through the site. Every request every page sent to every tool, and the tool's answer, was recorded. For each tool we therefore know not only what a perfect tool would report, but what that tool actually received.

We asked the same ten questions about the same two days (17 and 18 November 2026, UTC) twice: in each tool's own dashboard, the way a person would, and through each tool's MCP server, the interface that lets an AI assistant such as Claude query it. The questions covered visitors and page views, sources, a country, time on a page, a three-step funnel, file downloads, outbound clicks, rage and dead clicks, 404 pages, and purchases with revenue. We then read every tool for all four days, added server-side reporting where a tool supports it, and sent AI assistants, a browser agent and links from phone apps to the site.

Main results:

- **Counting is accurate when the visits arrive.** Most tools reported visitors within a few percent of the visits they actually received. The large differences between tools come from what never reached them or what they silently discarded: block lists, consent choices, automated browsers, VPN exits.
- **"Visitor" is a different unit in almost every tool**: a person per day, a person across days, a session, or a recorded session.
- **Questions beyond counting separate the tools.** Time on page ranged from 0 s to 18 min 45 s for a page whose true mean was 77 s. Revenue was shown correctly and plainly by a few dashboards only. One tool named the broken button with the right counts. Two tools could not show UTC days in their dashboards.
- **The AI servers invented no numbers.** Every number the assistants wrote came from a tool result or was simple arithmetic on one. Five servers gave the same numbers with two different models; the natural-language and list-based servers changed most.
- **AI assistants' fetchers run no JavaScript.** No script-based tool sees them. With a server-side feed, three tools named them as AI fetches; three counted them as ordinary visitors. No tool flagged a browser agent, and links opened from messaging apps arrived without a referrer.

The paper documents the method, every incident during the runs, the complete ground truth and per-tool delivery, every answer, and the raw data. The data is published with it.

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1. Key findings

1.1 The scorecard

Each cell counts the ten questions by verdict. A verdict compares the tool's answer with what **that tool** was actually sent on 17 and 18 Nov (chapter 5), not with an ideal total, so a tool is not marked down for visits a blocker kept from it.

- ✓ answered and close to the expected number
- ≈ answered, but with another metric, another window or a clear gap
- ✗ answered and wrong
- – the tool cannot answer
- · not checked

Findability is the mean 1-5 score over the questions the dashboard could answer (5 = on the first screen, 1 = only through the docs). Where an answer had two parts with different scores (for example visitors and page views), the two are averaged.

Tool	Dashboard ✓ / ≈ / ✗ / –	Mean findability	MCP ✓ / ≈ / ✗ / –	MCP server	MCP can set up
Privatrak	7 / 2 / 0 / 1	4.3	7 / 2 / 0 / 1	official, hosted	yes, with undo
Plausible	8 / 1 / 0 / 1	4.7	7 / 2 / 0 / 1 (revenue failed)	community	no
Pirsch	6 / 2 / 1 / 1	4.3	6 / 2 / 1 / 1	community	no
Umami Cloud	6 / 0 / 1 / 3	4.3	needs a paid plan	official	–
Fathom	3 / 2 / 0 / 5	4.8	no usable server	community	–
PostHog	6 / 4 / 0 / 0	3.3	7 / 3 / 0 / 0	official, hosted	yes
Mixpanel	6 / 3 / 0 / 1	3.1	7 / 2 / 0 / 1	official, hosted	yes (onto a board)
LogRocket	5 / 4 / 0 / 1	2.9	4 / 4 / 0 / 2	official, hosted	no
Matomo Cloud	1 / 7 / 1 / 1	4.2	1 / 7 / 1 / 1	official, hosted	yes (raw API)
Cloudflare Web Analytics	4 / 0 / 0 / 6	3.8	2 / 3 / 0 / 5	generic Cloudflare API	could change anything
Google Analytics 4	0 / 9 / 0 / 1	3.2	0 / 9 / 0 / 1	official, local	no
Microsoft Clarity	0 / 8 / 1 / 1	3.6	1 / 6 / 1 / 2	official, local	no
Amplitude	2 / 7 / 1 / 0	2.6	needs a paid plan	official	–
Mouseflow	0 / 6 / 1 / 1 (2 ·)	3.9	needs a paid plan	official	–
Sentry	0 / 1 / 0 / 9	4.0	0 / 1 / 0 / 9	official, hosted	no

How to read it:

- **The scorecard measures answers to ten questions, not tools.** Sentry is an error tracker and Cloudflare Web Analytics counts page loads only; their dashes mean the question is outside what they do. Chapter 2 matches tools to jobs.
- **GA4's row is all ≈ for one reason.** Its property ran on Los Angeles time, and neither its interface nor its API can show UTC days. Against its own window its numbers are close.
- **Matomo's row is mostly ≈ because it counted 49 of the 78 visits it was sent.** It is explained by its 30-minute visit, which merges some of a visitor's visits into one (78 → 59), and by visits from most of the VPN exits we used never appearing; the setting behind those drops is not identified (chapter 10). Against its own data its answers are consistent.

1.2 Eighteen findings

1. **Counting is accurate when the visits arrive; arrival is the problem.**

- Most tools counted within a few percent of the visits they actually received: Privatrak 72 visitors for 72 person-days, Cloudflare 95 visits for 95, LogRocket 97 sessions for 97, Fathom 71 for 70 and Umami 64 for 68 (counting two visits on 18 Nov that are not in the records, chapter 10).
- The big differences between tools come from what never reached them or what they dropped:
  - **Plausible** silently discarded every visit from Playwright's Chromium build, the automation build of Chrome our scripted visitors used: 42 visits on 17 and 18 Nov, more than half of what it was sent. It answered 202 and marked the events dropped. It kept a real Chrome visit.
  - **Matomo** counted 49 of the 78 visits it received.
  - **Mouseflow** counts only the sessions it records: 55 of 82.
  - **Consent-gated tools** (PostHog, Mixpanel, Amplitude, Matomo, Sentry, and Clarity in part) lost the declining visits that reached them, 16-19 per tool on those two days, as they should.
  - **Block lists and tracking protection** stopped the script in about eight visits per tool, for every tool except Privatrak, whose script was on none of the lists we checked, most likely because it is new and not yet listed.

2. "**Visitors" is a different unit in almost every tool.** The same visits were reported as person-days (daily-hash tools), cookie-identified persons (PostHog, Mixpanel, Amplitude), sessions (Clarity, LogRocket, Mouseflow), visits (Cloudflare, Matomo for a range) and recorded sessions only (Mouseflow). Two tools show two different user counts on neighbouring screens: PostHog 39 in the headline and 41 in the tables below it, GA4 28 "active users" and 30 "total users".

3. **Time on page is the least reliable metric in the market.** The true mean wall-clock time per view of `/article` was 77 s.

Tool	Reported time on `/article`
Amplitude	18 min 45 s
Pirsch	18 min 16 s
Matomo	3 min 55 s
GA4	67 s, per user, not per view
Plausible	66 s
Privatrak	61 s (active time, as its docs say)
PostHog	59 s
Mouseflow	47 s
Umami	0 s (its "visit duration" is measured between page views)

   Mixpanel, LogRocket, Fathom, Cloudflare, Clarity (per session only) and Sentry show no time per page. Pirsch's and Amplitude's values fit "time until the same visitor's next page view, even in a later visit" (chapter 14).

4. **Timezones decide what "17 Nov" means, and two dashboards could not show UTC days.** GA4 uses the property's zone and Pirsch's dashboard the domain's zone; both ended up off UTC despite being set at setup. Umami's date picker gives UTC days, but its URL stores the browser's midnights. Clarity takes exact days only through millisecond timestamps in the URL. GA4's answer for a finished day still changed a day later, as late data was processed.

5. **Revenue is where most tools stumble.** The site sent 7 purchases worth €56.

Shown plainly and correctly	Shown, with a catch
Plausible: €24 for its 3 delivered purchases	GA4: converted to USD without a word ($26.44 for €24)
Fathom: €56	Umami: opens in USD and shows "$0.00, 0 orders" until the currency is switched
Amplitude: 40 for its 5, after changing a property default that gives 0	Pirsch: only as event metadata (7 × 8 by hand)
	Mixpanel: 40 for its 5, with no currency
	Privatrak: only through an Insights sum, with no currency
	Mouseflow and Clarity: no amount at all

Through MCP, revenue was right in four servers of eleven: Privatrak, Pirsch, PostHog and Mixpanel. Plausible's community server failed with a schema error on every revenue metric.

6. **Rage and dead clicks: one answer with both counts exact.** The site's "Duplicate form" button does nothing. It was dead-clicked in 7 visits and rage-clicked in 4. Privatrak named it by its text with exactly 7 and 4, on its overview. LogRocket named it by text with the exact dead-click count (7 sessions) but found no rage clicks; Amplitude named it by text (5 dead; it has no rage event). Mixpanel (`b`: 11 dead, 1 rage), Sentry (`button#b`, sampled replays) and PostHog (through a query, or per page in the interface) named only an id or a selector. Clarity flagged a paragraph of text as dead instead. Rage clicks were missed almost everywhere. The click patterns were fixed in the plan before any tool was read (section 3.12).
7. **404 pages are visible only where the tool or the site names them.** Plausible and Pirsch detect 404 pages themselves; Fathom, PostHog and Mouseflow count them because the site sends each a 404 event; GA4 shows the page's title ("Page not found"). Everywhere else you must already know the broken path: Privatrak, Umami, Matomo and Cloudflare do not mark a page as a 404.
8. **One-page dashboards answer in one or two clicks; product-analytics tools make you build a report per question.** Plausible, Fathom, Umami, Pirsch and Privatrak's overview had most answers on the first screen. In Mixpanel, Amplitude and PostHog each answer was a chart to build: 6 to 10 clicks, with property names to know. Amplitude's charts have no total column. Mixpanel's home page said "No users seen in the last week" while events arrived all week.
9. **AI (MCP) servers: what the server is shaped like matters more than which tool is behind it.**
    - **Typed tools** (Privatrak, Plausible, Pirsch, GA4's report tool) answered in one call per question.
    - **Raw query languages** (PostHog's HogQL, Cloudflare's GraphQL, Matomo's raw API) made the assistant write and retry queries.
    - **Natural-language tools** (LogRocket, Clarity) rewrote the question; LogRocket moved the period in five of ten answers.
    - **Two models:** Privatrak, Plausible, Pirsch, Matomo and Cloudflare gave the same numbers with Claude Sonnet and Claude Opus. LogRocket, Sentry, Mixpanel, GA4 and, for one number, PostHog changed; GA4 and LogRocket for the better.
    - **No invented numbers:** every number not found verbatim in a tool result was a rate, sum or unit conversion of numbers that were.
    - **Setup:** four servers could set something up (Privatrak, PostHog, Mixpanel, Matomo). One of them could undo it (Privatrak).
10. **Privacy surfaces differ.** LogRocket and Sentry label sessions and replays with the visitor's full IP address. GA4's property setup pre-ticks three data-sharing options. Mouseflow starts a 14-day Premium trial without asking and records nothing until you confirm that personal data is excluded. Privatrak cannot answer "visitors from France" because it stores no location, by design.
11. **Most tools recognise nobody across days; for some that is the design.** Privatrak, Fathom, Plausible, Umami and Pirsch count a range's visitors as the sum of the days' visitors (a daily salt or hash, as their docs say). Matomo, PostHog, Mixpanel, Amplitude, Mouseflow and LogRocket recognise returning visitors through their storage; Matomo marked all 6 returning visits on each of the last two days as returning, exactly. Clarity recognises almost nobody (148 "unique users" for 40 personas), consistent with its cookie appearing only after consent (chapter 10).
12. **Bounce rate is not one metric.** For the same visits on 17-18 Nov the tools reported bounce rates from 3.8% to 92.9%. 56% of those visits saw one page, and 25% saw one page and clicked nothing.
13. **Single-page apps and URLs are handled differently.** PostHog recorded none of the site's `pushState` routes with its default setup. Pirsch kept a URL fragment as a page. Some tools keep query strings as separate pages, others strip them.
14. **What browsers hold back decides more than the tools do.**
    - Do Not Track: Mixpanel honours it. Clarity sent nothing for visitors with both Do Not Track and Global Privacy Control, but recorded a visit with Do Not Track alone.

- `navigator.webdriver` (a browser driven by a program says so): Plausible and Mouseflow send nothing, PostHog mostly nothing.
- uBlock Origin Lite blocked every tool but Privatrak (not yet on the lists); Firefox's strict mode blocked most.
- A consent decline is stored: a phone that declined the banner one day was still opted out of the cookie tools the next day.

15. **AI assistants' fetchers are named by three tools.** They run no JavaScript, so no script sees them. With a server-side feed from the web server's access log, Privatrak (AI assistants report), Matomo (AI Chatbots report) and PostHog (classification of its `$http_log` events) named ChatGPT's and Claude's fetches as AI fetches. Mixpanel, Amplitude and GA4 counted every fetch as an ordinary visitor's page view; Plausible and Umami dropped them; Pirsch showed nothing. Gemini's app fetched with the bare user agent `Google`, which nobody attributes to Gemini.
16. **Nobody flagged the browser agent.** A visit by Claude in Chrome, an AI agent driving a real browser, was an ordinary visitor in every tool that recorded it. Privatrak, whose documentation describes a rule for such agents, did not flag it either: the rule needs two clicks on one page, and the agent clicked once per page.
17. **In-app browsers send no referrer.** Links opened from WhatsApp, Slack and iMessage were Direct everywhere. The ChatGPT app appends `utm_source=chatgpt.com` to its links, which the tools read five ways: an AI channel, a referrer, a UTM value, "Other Advertising", or nothing.
18. **The fifteen tools cost a visitor 1.3 MB and 141 requests for three pages.** Amplitude (309 KB), PostHog (254 KB) and GA4 (183 KB) are the heaviest; Plausible (3 KB), Pirsch, Fathom and Umami the lightest. Four tools set their cookies on the whole parent domain. Privatrak, Plausible, Fathom, Umami, Pirsch and Cloudflare stored nothing in the browser.

2. Which tool for which job

No tool is best at everything, and most of them count well when visits reach them. They differ in what they receive, what they call a visitor, and which questions they can answer. This chapter matches tools to jobs, using only what the lab measured and what the vendors' own pages say (chapter 12, as of 20 Nov 2026). It is the one chapter that judges; every judgement points to the numbers behind it.

A word on bias. Privatrak is ours, and it is recommended for two of the jobs below. Those two lines rest on the same measurements as every other line: delivery (chapter 5), the dashboard and MCP answers (chapters 7 and 8), and the findings by topic (chapter 9). Privatrak's gaps are listed beside it, as for every tool.

2.1 The criteria

Criterion	What we looked at	Where
Delivery	how many of the visits reached the tool and were kept, given blockers, consent and the tool's own filters	chapter 5
The unit	what "visitor" means, and whether a person is recognised across days	chapters 9.1, 10
Answers	which of the ten questions the dashboard answers correctly, and how easily	chapter 7
AI access	how well an AI assistant answers through the tool's MCP server	chapter 8
Privacy	cookies, consent needed, what is stored and shown	chapters 9.14, 10, 12
Weight	what the snippet costs a visitor	chapter 10
Price	the free plan and the cheapest paid plan, from the vendor's page	chapter 12

2.2 Recommendations

You want	Best fit in this test	Why	Watch out for
Simple, privacy-first traffic statistics for a website	**Plausible**; also Fathom, Umami, Pirsch, Privatrak	Most answers on the first screen (findability 4.3-4.8); no cookies (their vendors state that no consent banner is needed); Plausible's page views were exact on every day for the real browsers it kept; snippets of 3-8 KB	Plausible discards automated browsers and many VPN and data-centre visits on its server (finding 1). Fathom placed some VPN and residential exits in Brazil and showed no UTM campaigns. Pirsch's dashboard shows only the site's own timezone. Umami opens revenue in USD
Product analytics without cookies: features, funnels, goals, click problems, AI-assistant access	**Privatrak**	Most complete delivery of all tools (102 of 104 visits, because its script was on no block list yet); 7 of 10 dashboard answers right; the one answer with both rage and dead click counts exact; automated visits marked rather than dropped; 7 of 10 MCP answers right (with PostHog, Mixpanel and Plausible the most), and setup through MCP with undo; an AI assistants report fed by the web server	Stores no location, so no country reports; no 404 detection; revenue only through an Insights sum, without a currency; no recognition across days (by design); its agent rule missed a one-click-per-page agent. PostHog documents a cookieless mode too (not tested here)
Full product analytics with identified users: retention, cohorts, replay, experiments	**PostHog**; then Mixpanel	Widest feature set; PostHog also labels AI fetchers when it gets server logs; both recognise visitors across days	Need cookies and consent; answers are reports to build (findability 3.1-3.3); PostHog recorded none of the single-page-app routes by default; Mixpanel counted AI fetchers as users; Mixpanel honours Do Not Track, so those visitors are missing
Recognising returning visitors	**Matomo**; also Amplitude, PostHog, Mixpanel	Matomo marked every returning visitor on the last two days as returning, exactly	Cookie tools need consent; Matomo did not record visits from most VPN exits we used and merges visits within 30 minutes; Amplitude's time on page was inflated (18 min 45 s for a 77 s read) and its charts have no totals

You want	Best fit in this test	Why	Watch out for
Session replay and heatmaps	**LogRocket** for debugging; Mouseflow; Clarity (free)	LogRocket's session count was exact (97 for 97); Clarity is free with no traffic limit	Clarity's counts are unreliable without consent: it splits pages into separate sessions and recognises almost nobody across days. Mouseflow records a sample (500 sessions a month free) and nothing from automated browsers. LogRocket and Sentry show full IP addresses
Errors in the front end	**Sentry**	Built for it: errors with replays	Not an analytics tool
Free counts with no setup	**Cloudflare Web Analytics**	Exact visits (95 for 95); free	Answers almost nothing beyond page loads and visits
The free default most sites already have	**Google Analytics 4**	Free and deep; recognises returning users	Its days follow the property's timezone and cannot be read in UTC; a finished day's numbers changed later; blocked by block lists and Firefox's strict mode; seven setup screens with data sharing pre-ticked
Seeing AI assistants read your pages	**Privatrak**, Matomo, PostHog, each fed from the web server	They named ChatGPT's and Claude's fetches as AI fetches (chapter 11)	Every tool needs a server-side feed for this; nobody attributes Gemini's fetches; no tool flagged a browser agent

2.3 What decides the choice more than the tool

- **What reaches the tool.** Block lists stopped every script except Privatrak's (not yet listed); consent banners and Do Not Track silence the cookie tools; Plausible and Matomo drop some visitors on their servers. The biggest differences in the totals came from this, not from counting.
- **What "visitor" means.** Cookieless tools count a person per day; cookie tools follow a person across days, with consent. Choose the definition you can live with, legally and analytically.
- **Which questions you ask.** If you need funnels, revenue, click problems or a country, check that the tool answers that question at all (chapter 7): several dashboards cannot.
- **Whether an assistant will ask for you.** If an AI assistant is going to query the tool, check the server's shape: typed tools answered in one call, natural-language tools rewrote the question, and five servers gave the same numbers with two models (chapter 8).

2.4 By situation

- **A marketing site, privacy-first, mostly human visitors:** Plausible, or Privatrak if you also want features, funnels and click problems without cookies.
- **A software product that needs to know what people do in the app, without cookies:** Privatrak.
- **A software product that needs identified users, retention and experiments, and can run a consent banner:** PostHog.
- **Next to either, as needed:** Sentry for errors, LogRocket for debugging replays, Clarity for free heatmaps (not for counts).

3. Method

3.1 Goal and questions

The lab was built to answer many questions from one set of visits, all of them about what a site owner sees when the same visitors reach different tools:

1. For the same visits, how many visitors, page views and sessions does each tool report?
2. How does each tool count a visitor who returns the next day, switches network, or changes browser?
3. What does each tool report as time on page and bounce rate for visits of known length?
4. Which referrers and UTM tags survive into each source report (letter case, `ref=`, a missing referrer)?
5. Which tools count, filter or flag scripted, automated, VPN and data-centre visits?
6. Which tools flag which click patterns as rage, dead, error or slow clicks?
7. Asked through each tool's MCP server, which answers match the ground truth?
8. What do AI assistants' fetchers, AI agents and links from phone apps look like in each tool?

The rule for every tool was to **run it with its defaults wherever a default exists**, because that is what its users get. Anything switched on or set up was written down, and was done before the visits it should count. Several tools count goals, funnels and heatmaps only from the moment they exist.

3.2 The test site

`clicklab.privatrak.com` is a small static site for a fictional form builder called "Mapleform". It was served by our own web server under a hostname of its own. Every page loads every tool's standard install snippet unchanged, plus a probe script (the ground truth, section 3.8).

Path	What it is	Test elements (`data-lab`)
`/`	home page	
`/article`	a long article (scroll depth, reading time), with an outbound link to `https://www.w3.org/WAI/tutorials/forms/` and a PDF download `/mapleform-checklist.pdf`	`article-outbound`, `article-pdf`
`/product`	product page with template links that carry a query (`/product?id=quote`, `/product?id=booking`) and a link to a page that does not exist (`/templates`)	`product-id-quote`, `product-id-booking`, `product-broken`
`/pricing`	three plan buttons; each sends **Plan selected** (`plan` = Free / Team / Business) and goes to `/checkout?plan=team`	`choose-free`, `choose-team`, `choose-business`
`/checkout?plan=team`	fake order form with no payment-like inputs; its button sends **Purchase** and goes on	`place-order`
`/order-complete`	"Order placed (test site, nothing charged)"	
`/contact`	contact form that goes on to `/thanks` after a real submit event; no field value appears in any URL	`contact-form`, `contact-send`
`/thanks`	"Thanks, we'll reply within a day"	
`/search?q=…`	a header search form on every page; the results page lists matching pages	`search-input`, `search-submit`
`/app`, `/app/forms`, `/app/answers`, `/app/settings`	one page whose tabs switch with `history.pushState`, no reload; a direct load of any of the four works	`app-tab-*`
any unknown path (e.g. `/templates`)	a 404 page with HTTP status 404 that loads the probe and every tool	`notfound-home`
`/lab`	nine click-test elements (below)	`lab-a` … `lab-i`

The nine `/lab` elements. Each element tests one kind of click problem.

Element	Label on the page	What a click does	What it tests
A, error	"Save draft" (button)	throws a JavaScript TypeError	error clicks
B, nothing	"Duplicate form" (button, `id="b"`)	nothing at all	dead clicks, rage clicks
C, slow	"Publish form" (button)	shows "Published." after a delay	slow clicks
D, decorative	"Quote template, 12 fields" (a card, not a control)	nothing	false positives on non-controls
E, new tab	"Open pricing in a new tab" (link)	opens `/pricing` in a new tab	a working link that some tools see as dead
F, text	a paragraph of body text	nothing	clicks on plain text
G, chart	an SVG chart, "Answers per day"	nothing	clicks on graphics
H, works	"Show preview" (button)	shows a preview at once	the control case
I, disabled	"Delete form" (disabled button)	nothing	disabled controls

The consent banner. It is shown on every page until a choice is made, and the choice is kept in `localStorage` under `lab-consent`:

- **Accept** calls each tool's documented consent-granted API.
- **Decline** calls the consent-denied API.
- **Ignoring** the banner calls nothing.

No consent defaults were set, so each tool kept its own.

Tool	Consent call used by the lab
GA4	`gtag("consent", "update", {ad_storage, analytics_storage, ad_user_data, ad_personalization})`
Matomo	`rememberConsentGiven` / `forgetConsentGiven`
PostHog	`opt_in_capturing` / `opt_out_capturing`
Mixpanel	`opt_in_tracking` / `opt_out_tracking`
Amplitude	`setOptOut(!granted)`
Clarity	`clarity("consentv2", {ad_Storage, analytics_Storage})`
Mouseflow	`start()` / `stop()`; Mouseflow has no consent call, and its consent article starts recording on consent
Sentry	stopping the replay; Sentry has no consent call either
LogRocket	none: LogRocket documents no consent call, so it was never told about a decline
Privatrak, Plausible, Fathom, Umami, Pirsch, Cloudflare	none: cookieless tools need no consent call

3.3 Events and goals

Events go through each tool's own documented call, from one adapter script. Each tool is wrapped, so one failure never stops the others. The probe records every event too, as ground truth.

Event	Properties	Revenue
Plan selected	`plan`	–
Purchase	`plan`, `order_id` (random per visit)	8.00 EUR for Team (Free 0, Business 24)
404	`path`	– (only for tools whose docs give a 404 recipe, e.g. Plausible)

Names. Names were written as above where a tool allows spaces, and in the tool's own convention otherwise. GA4, for example, takes `plan_selected`, and `purchase` with `value`, `currency` and `transaction_id`.

Revenue was sent through each tool's own revenue API where one exists:

- Plausible: revenue goal.
- Fathom: `_value` in cents.
- Umami: `revenue`.
- Matomo: an ecommerce order.

- GA4: `purchase`.
- Amplitude: Revenue.
- PostHog and Mixpanel: a `revenue` property.
- Privatrak: the detail `total` (Privatrak's name for a property sent with an event).

Goals and funnels set up in each tool that has them:

- Goals: the page `/thanks`; the events Plan selected and Purchase, with revenue where offered; outbound link; file download; 404.
- Funnel 1, contact: `/pricing` → `/contact` → `/thanks`.
- Funnel 2, checkout: `/pricing` → Plan selected → `/checkout` → Purchase.

What each tool needed for this is listed in chapter 6.

3.4 The tools

Fifteen tools ran on the site. All were on free plans, or on free trials that need no card.

Tool	Plan in the lab	Type	Visitor recognition (vendor docs)
Privatrak	ours	cookieless product analytics	HMAC of IP, user agent and project with a random daily key per project, deleted when the day is counted
Google Analytics 4	free	web analytics, cookies	`_ga` cookie
Plausible	30-day trial (Business features)	cookieless web analytics	hash of a daily salt, domain, IP and user agent; salt rotated every 24 h
Fathom	trial	cookieless web analytics	SHA-256 of IP, user agent, site ID and a daily salt (midnight UTC)
Umami Cloud	free (Hobby)	cookieless web analytics	uuid of website, IP, user agent and a salt rotated monthly by default
Pirsch	30-day trial	cookieless web analytics	hash of IP, user agent, date and a per-site salt
Matomo Cloud	21-day trial	web analytics, cookies	`_pk_id` cookie, 13 months
Cloudflare Web Analytics	free	cookieless page-load analytics	no visitor ID; visits only
PostHog	free	product analytics	`distinct_id` in a cookie and in local storage, 1 year
Mixpanel	free	product analytics	cookie / local storage ID
Amplitude	free Starter	product analytics	device ID in storage
Microsoft Clarity	free	session replay, heatmaps	cookies
Mouseflow	free (500 sessions)	session replay, heatmaps	cookies
Sentry	Developer (50 replays/month)	error monitoring with replays	replay session
LogRocket	free (1,000 sessions)	session replay	cookies / storage

Left out:

- **Simple Analytics** was dropped at setup: adding the domain failed with an error.
- **Hotjar / Contentsquare:** the free plan has no frustration signals.
- **Datadog and FullStory:** no free plan.

3.5 Personas

Every scripted visitor is a persona with fixed properties. Cookieless tools hash the network and user agent, while cookie tools keep an ID, so personas were built to test exactly where the counting differs.

Browsers. Each persona has one of these browser profiles:

Engine	User agent	Viewport
Chromium	Chrome 141 on Windows, macOS or Linux; Edge 141 on Windows	1536 × 864, 1440 × 900, 1920 × 1080, 1366 × 768
Chromium, mobile	Chrome 141 on Android 10	412 × 915
Firefox	Playwright Firefox, own user agent	1440 × 900, 1280 × 800
WebKit	Safari 26.6 (Playwright WebKit)	1512 × 982
WebKit, mobile	iOS Safari	390 × 844

Locales and countries.

- Locales are en-US (New York or Los Angeles time), en-GB (London), de-DE (Berlin) and fr-FR (Paris).
- A persona's country follows its locale: US, GB, DE or FR.

Automation styles.

- **Person-like** (`human`): automation markers hidden, person-like input throughout.
- **Agent-like** (`agent`): markers hidden, but it moves and clicks like a program. The pointer jumps straight onto what it clicks, and the page scrolls in one go.
- **Marked** (`marked`): Playwright's own markers (`navigator.webdriver`) left on.
- **Assignment:** every sixth persona is marked, and every sixth starting at the third is agent-like.

Visitors the tools see less of. These are fixed traits on chosen personas:

- uBlock Origin Lite (Chromium): p10, p23.
- Firefox Enhanced Tracking Protection set to Strict: p13, p26.
- Do Not Track and Global Privacy Control: p05, p11, p17 (p17 also crosses midnight).

Shared network. p27, p28 and p29 share one IP, like an office.

Other network. p04 and p07 each make one return visit from a different network, as a person switching from home to mobile data would (visits named `alt-ip`).

Consent. Person-like personas were split into thirds, dealt from a fixed seed: accept, decline, ignore. Agent-like and marked personas never answer the banner.

Groups in series r4:

- 30 residential personas (p01-p30)
- 6 VPN personas (p31-p36), two per country (US, GB, DE)
- 10 data-centre personas (p37-p46)

The per-persona table is Appendix C.

3.6 Visit kinds and sources

Visit kinds:

Kind	Path
bounce	one page, leaves
reader	`/article`, reads to a set depth, leaves
browser	home → product → pricing, and similar
product	`/product` and its `?id=` variants
contact	`/pricing` → `/contact` → form → `/thanks`
buyer	`/pricing` → plan button → `/checkout` → Place order → `/order-complete`
searcher	uses the header search, `/search?q=…`
app	the pushState app, switching tabs
downloader	clicks the PDF link (same tab)
outbound	clicks the w3.org link

Kind	Path
lost	follows the broken link to `/templates` (404)
lab	clicks one `/lab` element in a pattern: once, three times 200 ms apart, four times 300 ms apart, and so on

Sources. Each visit arrives from one of these:

Source	How it arrives
direct	no referrer, no tags
google, bing, duckduckgo	search engine referrer
hackernews, reddit, linkedin, x	referrer (`t.co` for X)
chatgpt	referrer `chatgpt.com` plus `utm_source=chatgpt.com`
perplexity	referrer `www.perplexity.ai`
newsletter	`utm_source=Newsletter&utm_medium=email&utm_campaign=November-Launch` (mixed case on purpose)
producthunt	`ref=producthunt`, no referrer
ads	Google referrer plus `utm_source=google&utm_medium=cpc&utm_campaign=forms-us`

Series r4 in numbers:

- Sources: direct 29, LinkedIn 13, Hacker News 11, Google 10, Reddit 9, DuckDuckGo 8, Product Hunt 8, ChatGPT 7, Bing 6, Perplexity 6, newsletter 5, X 5, ads 5.
- Kinds: lab 21, browser 17, reader 15, bounce 13, buyer 9, product 8, contact 8, app 8, searcher 8, downloader 5, outbound 5, lost 5.

3.7 Networks

Network	How	Why
Residential	a residential proxy, one sticky session per persona (asked to last 7 days), in the persona's country; reached through a local relay that holds the proxy login (from r4)	person-like visits must not be filtered as data-centre traffic, and cookieless tools must not merge everyone behind one IP
VPN	the NordVPN app on the laptop, real app exits (not its SOCKS servers), switched by hand per country; two personas per country share an exit	VPN users are a real share of visitors and land on data-centre IPs that some tools filter
Data-centre	one NordVPN Singapore exit, used on purpose as a control group	the bot-filter comparison

Guards.

- Before and after every VPN visit, the runner looked up the exit (ipinfo.io). It stopped the whole run unless the exit was a known VPN host in the right country, so nothing was recorded from the home connection if the VPN dropped.
- The manifest keeps every exit only truncated to /24.

3.8 Ground truth and checking

Two independent records hold the ground truth:

1. **The runner's manifest** (the runner is the Playwright program that drove every visit and recorded its requests), one line per visit (published as `visits.jsonl`, with IP networks replaced by pseudonyms). It records:
   - persona, day, slot, network, engine, mode, kind, source and consent
   - every page and its time
   - what the visit did (read depth, form sent, order placed, download, outbound, lab pattern)
   - every tool's requests with their HTTP status, or the browser's failure reason
2. **The probe**, a small script loaded on every page. It sends beacons to the lab's own server, so they land in the Caddy access log:

- `load`, with page, referrer, query, `webdriver` and user agent
- `leave`, with time on page, visible time, max scroll and every click
- events

Each visit carries a run label in the URL hash (`#r=r4-d1-p06-contact`), which the probe reads and removes.

A checker script compares the two after every round. It checks that each visit has:

- exactly one user agent and one IP
- a probe beacon
- a leave beacon for every page loaded
- 2xx answers from every tool that should answer

It also lists every failed tool request. It fetches the access log until the copy's size matches the server's, because three fetches during the run came back short.

Per-tool expected numbers (published as `expected-all.json` and `truth-*.json`) count, for each tool, only the visits whose requests to that tool were answered 2xx. A tool that never got a visit is not blamed for it. For tools that wait for consent, these numbers are upper bounds: a 2xx can be a configuration request without a recorded event.

3.9 Scoring the answers

The ten questions, asked about 17 and 18 Nov (UTC days) in every dashboard and through every MCP server:

1. visitors and page views
2. top sources
3. visitors from France
4. average time on `/article`
5. the contact funnel `/pricing` → `/contact` → `/thanks`
6. PDF downloads
7. outbound clicks to w3.org
8. the element on `/lab` with the most rage and dead clicks
9. views of the 404 page
10. purchases and revenue

Verdicts:

- ✓ answered and close to the tool's expected number
- ≈ answered, but another metric, another window, or a number that differs from the expected one, even when the delivery records explain the gap
- ✗ answered and wrong
- – the tool cannot answer
- **E** the server failed (MCP)
- · not checked

Dashboard steps are the screens and clicks from the tool's start page to the number. We count steps, not seconds: an agent's speed says nothing about a person's.

Findability, 1 to 5. This score is subjective, and is the point of the scoring. It rates how easy the way to the number was, independent of the step count.

Score	Meaning
5	on the first screen, or one obvious click away, named in plain words
4	one menu away, where you would look first
3	had to look around, or the name was unclear but the guess was right
2	in an unexpected place (settings, a filter, a report builder), or named misleadingly; needed a second try or the docs

Score	Meaning
1	found only through the docs or search, or not found

MCP difficulty, 1 to 5, is the assistant's own score per question:

Score	Meaning
5	one obvious call with plain parameters
4	the right tool quickly, after a lookup
3	trial and error, or interpretation needed
2	a raw query language, or several failed calls
1	not possible

3.10 Schedule as planned

The visits are test traffic either way. The days only buy what needs a real calendar: a visitor returning the next day, a visit across midnight, daily salt rotation, and the tools' own processing delays.

Day	Plan
0	build the site, probe and runner; create the accounts; deploy
1	every single-visit experiment and every persona's first visit; phone and Claude-in-Chrome rounds
2	next-day returns; a pair of visits across midnight UTC
3-4	later returns; the MCP questions once the tools show days 1-2
5-6	read every dashboard after processing delays

In practice the MCP test ran on 19 Nov and the dashboard test on 20 Nov, the lab's last day (chapter 4).

3.11 Run after the series (20 Nov)

The parts of the plan that series r4 did not run were run on 20 Nov, after its last visits, with a server-side feed and Cloudflare in front first (chapter 11):

- **Real AI fetchers:** ChatGPT, Claude (through Claude Code's web fetch tool), Perplexity and Gemini each asked to read a lab URL. Perplexity fetched no page (only one `/robots.txt`).
- **Agents:** Claude in Chrome clicked through. ChatGPT agent mode and Perplexity Comet's agent need paid plans and were not run; Comet's search fetched nothing.
- **Phone-app links:** WhatsApp (a Slack link), the ChatGPT app and iMessage, on one iPhone. The Hacker News and Reddit apps were not run.
- **Heatmap viewers:** opened in Clarity, Mouseflow and LogRocket; they load no lab pages (chapter 10).
- **Not run:** Google Search Console's live test, and Clarity's Bot Activity (it shows a CDN's logs; Cloudflare's were read directly).

3.12 Our role, and what it does not protect against

Privatrak is our product, and it is one of the fifteen tools. We designed the site, chose the questions and scored the answers. These are the safeguards, and their limits:

- **The ground truth is mechanical.** Expected numbers come from the request records, not from judgement: a tool is compared with what it was sent, which favours no tool. The records are published (`visits.jsonl`), so every expected number can be recomputed. Page loads the runner did not record are published beside them (`unrecorded.json`) and counted as "up to" on top of the expected numbers.
- **The questions were fixed before any tool was read**, and are the same for every tool. They are ordinary analytics questions; we did not add questions Privatrak alone can answer. Two of the ten are ones it cannot answer on its own (a country; 404 pages, which it does not mark), and a third (revenue) only without a currency.

- **Verdicts follow written rules** (section 3.9), and every answer is quoted, so a reader can re-score it. Findability is one assessor's judgement, for every tool alike.
- **Gaps are listed by one rule for every tool**: in the tool profiles (chapter 13), a gap is what cost an answer or could mislead a reader, and deliberate choices are listed apart. Privatrak's are in its profile like everyone else's.
- **The click patterns were fixed before any tool was read.** The rage-click visits clicked "Duplicate form" three times 200 ms apart or four times 300 ms apart (section 3.6). Privatrak's own default counts three clicks within a second each as a rage click, which those patterns meet; so do the thresholds most tools document.
- **Privatrak's setup flow changed during the lab.** On 15 Nov, after its 6-step setup had been noted next to the other tools' flows, it was changed to two screens (chapter 6).
- **Our own browser blocks Privatrak.** The browser we work in blocks requests to Privatrak's ingest so that we do not track ourselves. Visits made in it (the Click Map and Element Picker sessions of 18 Nov, the stray visit of 20 Nov, the Chrome visit of the manual round, the first agent run) reached every tool but Privatrak (chapter 4).
- **What it does not protect against:** we know Privatrak best, so we may have found its answers faster; we chose which "beyond counting" areas to examine; and Privatrak's own setup flow was changed during the lab (chapter 6). Weigh the Privatrak lines with that in mind.

4. How the runs went

4.1 Four series, three stopped

The data in this paper is series **r4** (17 to 20 Nov 2026). Three earlier series were started and stopped. Each stop came from a fault in the lab, not in a tool, and each fault was fixed before the next series.

Series	Dates	What ran	Why it stopped	Fix
Pilot	14 Nov	~28 visits from a laptop (through a NordVPN Singapore exit) and a server	data-centre exits only: Matomo dropped them, Plausible kept 3 of ~28, cookieless tools merged everyone behind one IP	residential proxies for person-like visits
Check visit	14 Nov, 17:43-17:51 UTC	8 visits from one UK residential IP through every flow	(a check, not a series) Plausible dropped all 6 events of the repeat buyer: it drops by IP reputation, per IP	runner records Plausible's `x-plausible-dropped` header per visit
r2	15 Nov	day 1 complete: 73 visits (residential, data-centre, VPN)	what a page sent while unloading carried the browser's own user agent (Chrome/153, HeadlessChrome, bare WebKit), not the persona's: 30 of 73 visits split in two for IP+UA tools; found when Privatrak's checkout funnel showed 1 order for 3	Chromium and Firefox get the persona's user agent at launch; every visit ends by navigating to `about:blank`
r3	16 Nov	day 1 complete: 73 visits	on all 18 residential WebKit visits, Umami, LogRocket and Cloudflare got nothing and Amplitude nothing on 11: WebKit's CORS preflights went through the authenticated proxy without the login and failed (`NSURLErrorDomain −1013`); the self-test could not show it because it blocks every tool request	a local relay holds the proxy login, so no browser request meets a 407; a checker written to catch such gaps
r4	**17-20 Nov**	**122 visits over 4 days, all as planned**	completed	

Other r2 and r3 incidents shaped the runner:

- **Shared proxy-auth cache.** Two contexts with different proxy logins in one Chromium shared a proxy-auth cache and stalled. Fix: one browser per proxied visit, with the proxy set at launch.
- **Hanging page loads.** Tool scripts hanging on flaky proxy exits kept the page's load event from firing. Fix: a visit waits for the document, gives the load event 20 s, then carries on (recorded as a slow load). A hanging script then counts against that tool instead of ending the visit.
- **Strict Firefox lists.** The strict Firefox profiles could not download their tracker lists through the proxy. They fetched them once without it, from Mozilla's server only, never the lab site.
- **Sticky sessions don't always hold.** In r2, a sticky proxy session moved to another /24 within 28 minutes.

Before r4, a full self-test ran through the relay, with tool requests switched on and two check personas (k01, k02) that are never part of a series. It covered every flow on Chromium, WebKit and Firefox on the laptop (24 visits), plus a buyer visit in Chromium and WebKit on the server. The checker found 0 problems.

4.2 Day 1: 17 Nov (73 visits)

Time (UTC)	Round	Visits	Notes
05:08-05:38	residential, two at a time, then a second pass	51	the scheduled 05:00 start did not fire (the laptop was asleep); started by hand
05:38-05:43	residential, return within the hour	6	
05:57-06:03	data-centre group, NordVPN Singapore (GSL Networks)	10	started automatically when the exit matched
06:38-06:40	VPN Germany (PacketHub)	2	p35, p36
10:02	VPN UK (Clouvider)	2	p33, p34
10:06	VPN US (PacketHub)	2	p31, p32

Day 1 complete: 73 of 73 (57 residential, 10 data-centre, 6 VPN).

What the checker found on day 1. There were 19 missing tool deliveries. None was retried, because a visit run again would count twice in every other tool.

- **Umami answered HTTP 500 from 05:09 to 05:17 UTC on every engine**, then 200 again from 05:18. In that window:
  - 8 visits got a 500.
  - 4 Chromium visits sent no Umami request at all.
  - One WebKit visit had 4 requests cancelled.

  Umami is therefore missing 13 of the first 15 visits of the day. This was an outage on Umami's side.
- **GA4 missed p07 and p18 entirely.** gtag.js failed with `ERR_TUNNEL_CONNECTION_FAILED` on both visits of each persona. Those two sticky exits could not open a tunnel to googletagmanager.com, while every other tool reached them. This is a proxy artefact, comparable to r3's Fathom failures on two personas.
- `r4-d1-p26-bounce` (Firefox, strict tracking protection, slow load):
  - All 5 Privatrak requests ended `NS_BINDING_ABORTED`.
  - Pirsch's request ended in a proxy gateway timeout.
  - LogRocket's script failed.
- **Plausible dropped all 9 Chromium visits of the data-centre group and kept the one Firefox visit** (`r4-d1-p44-searcher`), exactly as in r3 on another exit network. The browser matters, not only the IP (chapter 9.12).
- `r4-d1-p35-outbound` (WebKit, VPN) sent its leave beacon with Playwright WebKit's bare user agent, without `Version/26.6 Safari/...`, at the click on the outbound link. An IP+UA tool counts that leave as another visitor.
- **Two WebKit leaves were lost through the proxy.** `r4-d1-p08-outbound` (WebKit, residential) and the 16 Nov WebKit check visit have a load beacon and no leave beacon.
- **One late read.** After the US round the checker said 26 problems; a minute later it said 20, as before. Its first copy of the access log was short. Since then, the checker is read again a minute after a round before a new problem is believed.

4.3 The midnight pair: 17/18 Nov (8 visits)

- **Where it ran.** On a server, in a Playwright container (headed, with a virtual display), through the same residential sessions. It ran 4 visits from 23:44 UTC (p16-p19, `-late`) and 4 from 00:05 UTC (`-early`), and each slot had a second pass. All 8 ran on the first pass.
- **Before the start:**
  - A dry run of 4 + 4 visits.
  - One request through the relay came out GB / Virgin Media.
- `r4-d2-p19-late` (WebKit, downloader) **changed exit IP during the visit.** The load beacon came from one residential IP, and the leave beacon about 70 s later from another.
  - Around the switch, requests failed with `Peer failed to perform TLS handshake` (Umami, Cloudflare, LogRocket's script).
  - All 5 Privatrak requests ended "Load request cancelled".
  - In IP+UA tools p19-late may count as two visitors, and several tools have it only partly.
- **The pair as a salt test.** p16, p17 and p18 kept the same IP before and after midnight, so for them only the day changed. That makes them the clean test of daily-salt rotation.

4.4 Runner fixes between day 1 and day 2

1. **WebKit outbound, reproduced locally.** When a Playwright WebKit tab follows a link to *another site*, nothing the page sends on `pagehide` arrives: not sendBeacon, not a keepalive fetch, not an image.
   - Following a link on the same site, or going to `about:blank`, delivers everything with the persona's user agent.
   - Setting the user agent by header or by route changes nothing.

   Fix (WebKit only): the navigation the click starts is held (aborted by a page route on the outbound host, after the click and everything the tools do on it). The page is left to `about:blank`, then the outbound URL is opened. The record says `outbound.leftVia: "about:blank"`.
2. **Leave beacons in the checker.** Every page loaded must report leaving. Over day 1 this found one more visit, `r4-d1-p04-reader` (WebKit):
   - The runner had closed the browser 1.5 s after `about:blank`.
   - Over day 1, the last leave beacon arrived 0.2-1.6 s after a visit's end through the proxy, with 1.41, 1.49 and 1.64 s at the top.
   - The wait is now 5 s for every engine.
3. **Checker fetch.** The checker copies the access log and fetches it until the bytes match, up to 5 tries.
4. **Proof visits.** Two WebKit outbound check visits, one through the proxy and one through the VPN, delivered both load and leave beacons with the persona's user agent. The checker found 0 problems.

4.5 Day 2: 18 Nov (29 visits)

Time (UTC)	Round	Visits	Notes
23:44 (17 Nov) / 00:05	midnight pair, on the server	8	above
05:17-05:27	residential, two at a time	12	the laptop was on a VPN the whole time (laptop → VPN → residential proxy → site); the tools saw only the residential exits
06:13-06:17	VPN Germany (PacketHub): p01, p03 returning via VPN, p35, p36	4	p36 went through `/pricing`, `/contact`, `/thanks`
06:40-06:43	VPN UK (PacketHub): p02 via VPN, p33, p34	3	one short log fetch, second matched
06:48-06:50	VPN US (Datacamp): p31, p32	2	two short fetches before the third matched

Day 2 complete: 29 of 29.

Two new problems:

- **`r4-d2-p11-contact`** (Firefox) stopped after `/` and `/pricing`. The click to `/pricing` arrived, but the page's load event did not come within 20 s and the runner gave up the visit. The tools saw two page views and no contact form.
- **`r4-d2-p13-outbound`** (Firefox, strict) loaded `/article` and never reported leaving. One Privatrak request ended `NS_BINDING_ABORTED`. It was the first Firefox outbound visit of the series. A later local test showed that Firefox, unlike WebKit, does deliver `pagehide` sends on a cross-site navigation (chapter 14), so the cause is likely the proxied, strict context. This visit is why several tools show 6 outbound clicks where 7 were made.

Runner fix after the residential round. Following a link now waits for the new page's response and its DOMContentLoaded, then gives its load event 20 s without failing the visit. Two full test runs passed 44 of 45 each. The misses were one Firefox contact visit and one WebKit lost visit; each passed 4 of 4 when run alone, so they were most likely clicks that missed under the load of three browsers at once.

4.6 Day 3: 19 Nov (10 visits)

- **The round.** 06:05-06:14 UTC: 10 residential visits from the laptop without the VPN. One visit got no exit IP on the first pass and ran on the second.

- **What the checker found:**
  - `r4-d3-p06-contact` (WebKit): gtag.js failed ("The network connection was lost"), so GA4 has nothing of it.
  - `r4-d3-p09-app` (Firefox): Clarity's script aborted.
  - `r4-d3-p09-app` also changed exit at the very end, like p19-late. Only what was sent as the visit ended came from the new IP.
- **Residential IPs are not kept across days**, although every session asked for a 7-day lifetime.
  - Within a day, a persona kept its IP.
  - On every new day, every returning persona came from a new IP.
  - By day 4, p11-p15 had used four different IPs in four days, p16-p19 three, and p20 two.
- **What this means for the reading:**
  - A next-day return is a new IP plus the same user agent.
  - Tools that count by a daily-salted IP+UA hash count it as new either way.
  - So the next-day returns test only the tools that keep something in the browser (cookies, local storage). The persona state files carry that across days.
  - The daily-salt test rests on the midnight pair.

4.7 The manual round: 19 Nov, 07:12-07:20 UTC

One of us made four visits in real browsers, with no automation. Each opened with a `#r=human-…` label so the probe could tell them apart. The laptop was on a home connection and the phone on mobile data, both in Thailand. Their raw access records are not published.

Visit	Browser	Pages (time on page)
`human-l1-chrome`	Google Chrome 156, macOS (our work browser, which blocks Privatrak's ingest)	`/article` 85 s, `/pricing` 16 s, `/checkout?plan=team` 4 s
`human-l2-safari`	Safari 26.5, macOS	`/article` 77 s, `/pricing` 19 s, `/checkout?plan=team` 5 s
`human-p1-app`	iOS Safari 27.2, opened from a messaging app	`/article` (no leave), `/article` 25 s, 3 s, 41 s, `/pricing` 11 s; mobile IP changed within the visit
`human-p2-safari`	iOS Safari 27.2	`/article` 39 s, 2 s, 2 s (reloads), `/pricing` 15 s, `/search?q=Test` 3 s, `/article` 2 s

What the round showed:

- **No referrers.** Every entry came without a referrer, including the link opened from the app, so it shows as direct.
- **Real phones change IP too.** The phone's mobile IP changed 26 s into P1, as the proxy did twice.
- **Plausible kept the real Chrome visit.** Today, Thailand, Chrome: 1 visitor, 3 page views, visit duration 1 min 40 s (true: 104 s). So Plausible's dropping of every lab Chromium visit is about Playwright's Chromium build, not Chrome users.
- **Plausible's merging.** It showed 4 visitors from Thailand that day: L1, L2, and the phone as two visitors (its two IPs). P1 after the IP switch and P2 merged, because they had the same IP and user agent.

4.8 Day 4: 20 Nov (10 visits) and one stray visit

- **The round.** 04:02-04:10 UTC: 10 residential visits (p11-p20), all on the first pass. The checker found 0 problems. Every returning persona came from a new /24 again.
- **The stray visit**, at about 05:01 UTC during the dashboard test:
  - Clicking the site's name in Cloudflare's site list opened `clicklab.privatrak.com` in our own browser (Chrome on macOS, no `#r=` label). The tab was closed at once.
  - Tools count it on 20 Nov; LogRocket shows a 1-event session from Thailand.
  - It is not in the manifest or in any ground truth, and it does not touch 17-18 Nov.

4.9 After the series: 20 Nov, from 10:26 UTC

- **Server-side sender** live from 10:26 UTC (GA4 from 10:50).
- **Cloudflare in front of the site** from 11:10 UTC, with Cloudflare's own injected beacon switched off at 11:20 UTC; no visit ran in between.
- **AI fetchers, agent and phone-app rounds** 11:44-12:06 UTC, **page-weight runs** 12:13 UTC, a diagnostic page view at 12:44 UTC and a repeat of the agent visit at 14:24 UTC. Chapter 11 has the timeline. None of them touch 17-18 Nov.
- **The laptop used a VPN with a German exit** during these rounds.

4.10 Incidents that affect the 17-18 Nov numbers

The complete list, so that every gap in chapters 7 and 8 can be traced:

Visit or window	What happened	Who is affected
17 Nov 05:09-05:17	Umami answered HTTP 500	Umami: 13 of the first 15 visits missing
p07, p18 (17 Nov)	gtag.js could not load through two proxy exits	GA4: 4 visits missing
`r4-d1-p26-bounce`	Firefox strict and a slow load: Privatrak requests aborted, Pirsch gateway timeout, LogRocket script failed	those three
`r4-d1-p08-outbound`	WebKit leave lost through the proxy	whatever the tools send as the tab leaves: the outbound click, Privatrak's page view update
`r4-d1-p35-outbound`	leave sent with WebKit's bare user agent	IP+UA tools may count a second visitor
`r4-d1-p04-reader`	leave lost (browser closed 1.5 s after `about:blank`)	time on page for that view
`r4-d2-p19-late`	exit IP changed within the visit; TLS failures around the switch	IP+UA tools: possibly two visitors; Umami, Cloudflare, LogRocket partly; Privatrak received nothing of it
`r4-d2-p11-contact`	stopped after `/pricing`	no contact form: a funnel entry without completion
`r4-d2-p13-outbound`	Firefox leave lost on the cross-site navigation	outbound click: 6 instead of 7 in several tools
Data-centre group, 17 Nov	9 of 10 visits Chromium on a hosting network	Plausible dropped 9 of 10
All Playwright-Chromium visits	Plausible answered 202 and dropped the events	Plausible: 42 visits on 17-18 Nov
17 Nov 05:33 UTC, `r4-d1-p14-lab-E-newtab-one`	"Open pricing in a new tab" opened `/pricing` in a second tab, which the runner does not record: +1 page view, same visitor, not in the records	every tool that loaded in that tab; Privatrak holds it
18 Nov 11:11 UTC, Click Map	we opened Privatrak's Click Map and Element Picker (its tools for naming page elements, which open the site in a browser tab, `#st-picker=…` in the URL) on the site: +1 visitor, 4 page views, not in the records	every tool but Privatrak (our work browser blocks it)
18 Nov 17:56 UTC	an unknown visitor: +1 visitor, 2 page views, not in the records	every tool; Privatrak holds 1 page view (`/`)

5. Ground truth: what happened on 17 and 18 Nov

Both answer tests ask about 17 and 18 Nov 2026, in UTC days. This chapter gives two things for those days:

- what a perfect tool would have reported
- what each real tool was actually sent

Every verdict in chapters 7 and 8 is measured against the second.

5.1 What a perfect tool would report

On 17 and 18 Nov the lab made **104 visits**: 102 from series r4, plus the two WebKit proof visits of 17 Nov (section 4.4), which used two check personas and count like any visit because every tool received them. These came from **47 personas**, which makes **72 person-days** and **201 page views**.

Measure	Value
Visits	104 (17 Nov: 79, 18 Nov: 25)
Personas	47
Person-days (what a daily-salt tool should count as visitors)	72
Page views	201 (17 Nov: 142, 18 Nov: 59)
Visits from France	19 visits, 12 person-days
Views of `/article`, mean wall-clock time per view	25 views, 77.0 s
Contact funnel `/pricing` → `/contact` → `/thanks` (visits)	23 → 4 → 4
PDF downloads (`/mapleform-checklist.pdf`)	5
Outbound clicks to w3.org	7
Views of the 404 page `/templates`	5
Purchases / revenue	7 / 56 EUR (each 8 EUR, Team plan)
Sources (visits)	direct 26, LinkedIn 11, DuckDuckGo 8, Hacker News 8, Google 8, Reddit 8, then the rest
"Duplicate form" on `/lab`	dead clicks in 7 visits, rage clicks in 4

When the visits happened. All times are UTC.

Hour	Visits (r4)	What
17 Nov 05:00-06:00	64	day 1 residential round and returns within the hour
17 Nov 06:00-07:00	5	data-centre group (rest) and VPN Germany
17 Nov 10:00-11:00	4	VPN UK and US
17 Nov 23:00-24:00	4	midnight pair, before midnight
18 Nov 00:00-01:00	4	midnight pair, after midnight
18 Nov 05:00-06:00	12	day 2 residential round
18 Nov 06:00-07:00	9	day 2 VPN rounds

So 17 Nov is dominated by one hour: 64 of its 77 r4 visits came between 05:00 and 06:00. Several MCP reports noticed this burst and called it test traffic (chapter 8).

Clicks on the `/lab` elements:

Element	Visits with a click	Visits with rage clicks
B, "Duplicate form" (does nothing)	7	4
A, "Save draft" (throws an error)	2	1
C, "Publish form" (slow)	2	1
D, decorative card	2	1

Element	Visits with a click	Visits with rage clicks
G, SVG chart	2	1
H, "Show preview" (works)	2	1
I, "Delete form" (disabled)	2	1
F, plain text	1	1
E, "Open pricing in a new tab"	1	0

"Rage" here means the visit's click pattern was three or more quick clicks, for example three 200 ms apart or four 300 ms apart. Whether a tool calls that a rage click depends on its own threshold.

Three page loads are not in the records, so they are not in these numbers (section 4.10):

Time (UTC)	What	Visitors	Page views
17 Nov 05:33	the new tab of `r4-d1-p14-lab-E-newtab-one` (same visitor)	0	1
18 Nov 11:11	our opening of Privatrak's Click Map on the site	1	4
18 Nov 17:56	an unknown visitor	1	2

So any tool may show up to 2 more visitors and visits and up to 7 more page views than the numbers below. Which of them a tool received cannot be told from the records, so chapters 7 to 9 add them as "up to" where they matter. The data download lists them in `unrecorded.json`.

5.2 What each tool was actually sent

Requests to a tool can fail, be blocked, be dropped by the tool, or never be made (after a consent opt-out). The manifest records each request's outcome, so each tool has its own expected numbers.

Tool	Visits	Person-days	Page views	France visits / pd	Funnel	PDF	Outbound	404	Purchases
All (perfect)	*104*	*72*	*201*	*19 / 12*	*23 → 4 → 4*	*5*	*7*	*5*	*7*
Privatrak	102	71	199	18 / 11	23 → 4 → 4	4	7	5	7
Fathom	99	68	194	19 / 12	22 → 4 → 4	4	6	5	7
Pirsch	99	68	194	18 / 11	22 → 4 → 4	4	6	5	7
LogRocket	97	67	192	18 / 11	22 → 4 → 4	3	5	5	7
Cloudflare	95	66	190	18 / 11	22 → 4 → 4	3	5	5	7
GA4	92	65	186	18 / 11	22 → 4 → 4	3	5	5	7
Clarity	84	60	176	14 / 9	22 → 4 → 4	3	4	5	7
Umami	83	66	164	15 / 11	20 → 3 → 3	2	4	4	7
Amplitude	82	60	164	16 / 10	20 → 4 → 4	3	3	5	5
Mouseflow	82	58	165	15 / 9	16 → 3 → 3	3	5	5	5
Matomo	78	58	150	13 / 9	19 → 3 → 3	3	4	4	5
Sentry	77	57	146	13 / 9	18 → 2 → 2	3	4	4	5
Mixpanel	69	52	138	9 / 7	18 → 2 → 2	3	3	4	5
PostHog	66	50	126	10 / 7	13 → 2 → 2	4	4	4	3
Plausible	39	26	71	3 / 2	5 → 1 → 1	3	4	3	3

How to read the table:

- **pd** means person-days: one persona on one day.
- **Privatrak, checked event by event.** Its stored page views (Privatrak keeps events; only the per-visitor session records are deleted) were matched to the records by page and time. 198 of its 199 page views are there; the missing one is the last tab of `r4-d1-p22-app`, whose request was cancelled as the WebKit browser closed. The other two stored page views are the unrecorded new tab and the unknown visitor's `/`. That makes the 200 its dashboard

shows. Its visitors are 72: 71 person-days plus the unknown visitor. Per day it shows 47 and 25 against 46 and 26, one more on 17 Nov and one fewer on 18 Nov; the session records that would say which were deleted by the nightly sweep, by design, so the split cannot be traced further.

- **Some counts can exceed what a tool really recorded.** The outbound, PDF and 404 columns count visits that delivered *something* to the tool. For consent-gated tools, a 2xx can be a configuration request without a recorded event, so their numbers are upper bounds.
- **GA4 is on its own window.** GA4's property runs on Los Angeles time, so in practice it reports a different window: 17 Nov 08:00 to 19 Nov 08:00 UTC. For that window the manifest gives 38 delivered visits, 23 personas and 92 page views. The manual round adds 3-4 users and about 17 page views.

Appendix D has the same table with per-day splits, the delivered sources per tool and the `/lab` clicks per tool.

5.3 Why visits did not arrive

The 102 r4 visits on 17-18 Nov, per tool. Columns:

- ✓ at least one 2xx
- D dropped by the tool
- S the script failed to load
- B blocked in the browser
- 5 the tool answered HTTP 500
- ✗ every request failed
- · nothing sent (split by whether the visit declined consent)

Tool	✓	D	S	B	5 / ✗	· after decline	· other
Privatrak	100				2 ✗		
Pirsch	97		4		1 ✗		
Fathom	97		4		1 ✗		
LogRocket	95		7				
Cloudflare	93		8		1 ✗		
GA4	90		8	4			
Clarity	82		9			4	7
Amplitude	81		8		13 ✗		
Umami	81		8		7 × 500, 2 ✗		4
Mouseflow	80		9				13
Matomo	77		8			17	
Sentry	76		8			18	
Mixpanel	68		8			19	7
PostHog	65		8			16	13
Plausible	37	44	8				13

The causes, tool by tool:

- **Blockers and tracking protection** account for most of the S column, which is about 8 per tool. Two personas ran uBlock Origin Lite (Chromium) and two ran Firefox strict tracking protection, and these block most tools' scripts. Privatrak's script was not on the block lists, so it shows no S. A separate test in October found it on none of three major lists.
- **Consent opt-outs** (30 declines on these days) stop Matomo, Sentry, Mixpanel and PostHog, and some Clarity sends. Mouseflow's and PostHog's "other" counts include visits with no consent answer where the tool waits for consent or records only some sessions.
- **Plausible** answered 202 and marked the events dropped for 44 visits: 42 Chromium and 2 WebKit. All Playwright-Chromium visits were dropped. The manual round shows that a real Chrome is kept, so the trigger is Playwright's

Chromium build combined with IP reputation (chapter 9.12).

- **Umami's** outage: 7 visits got HTTP 500, 2 failed, and 4 sent nothing during it.
- **Amplitude's** 13 failed visits all declined consent. Their only Amplitude requests (10 WebKit, 3 Firefox) were cancelled as the page changed, so after an opt-out nothing was answered. In effect these are consent losses too.
- **GA4's** 4 blocked visits are Firefox strict tracking protection, which blocks GA4 but not every tool. Of its 8 failed script loads, 4 are the two proxy exits that could not reach googletagmanager.com (`ERR_TUNNEL_CONNECTION_FAILED`), and 4 are uBlock Origin Lite.

Over the whole series (122 visits, four days), Appendix B gives the totals per tool and a symbol for every single visit.

5.4 Returns, IPs and what the visits can test

Test	Can it be read from r4?	Why
Same-day return within the hour	yes, for every tool	same IP, same browser state
Next-day return, cookie and storage tools	yes	browser state was saved per persona and carried across days
Next-day return, IP+UA hash tools	no: always a new visitor	the residential proxy gave every returning persona a new IP each day, despite a 7-day sticky session
Daily salt rotation	yes, from the midnight pair	p16, p17 and p18 had the same IP at 23:44 and 00:05
Network switch (Wi-Fi → mobile)	partly	three residential personas returned on day 2 through the VPN, with the same browser and another network
Shared IP (household or office)	yes	p27-p29 share one residential IP; VPN pairs share an exit
VPN filtering	yes	6 VPN personas, 15 visits
Data-centre filtering	yes	10 visits from one NordVPN Singapore exit
Automation flag	yes	17 marked visits, 16 agent-like
Consent	yes	30 accept, 35 decline, 57 ignore over the series

6. Setup and onboarding

Notes written while setting up each tool (14 and 15 Nov) and connecting each MCP server (19 Nov). **Steps** means the screens between an empty account and an install snippet in hand.

6.1 From sign-up to snippet

Tool	Steps	What worked	What got in the way
Plausible	1	lands on "Add tracking to your site" with the snippet, four install methods (script, WordPress, GTM, NPM) and an "I've installed it" check	the snippet text can't be selected by automation (fine for people)
Fathom	1	site ID shown in the site list	no domain asked; the site was named "Privatrak"
Umami	1	"Tracking code" dialog straight from the website list	–
Microsoft Clarity	1	the project opens on "Getting started" with the code	–
Amplitude	1	one-line snippet with checkboxes (Session Replay, Autocapture) that rewrite it live; an "AI prompt" for coding agents is the recommended path	API key shown truncated
LogRocket	1	app created during sign-up	–
Pirsch	2	after adding the domain, "Choose your integration" with the snippet and a copy button; server-side API offered as a first-class option	the public sign-up URL redirects to the login page
Privatrak	6 (2 since 15 Nov)	screen 1 asks only for the project name and time zone (pre-filled from the browser); screen 2 shows the install code with the website key already in it (created with the project), as tabs for the script tag, WordPress, Shopify, Next.js, Nuxt, npm and an AI-assistant prompt, with the auto-capture choices, a live first-event check and a privacy line; tracker and privacy settings keep their defaults	–
Mixpanel	2	settings page is clear (data residency, timezone, session timeout)	the project token is not visible, only a Copy button; EU residency needs `api_host` set by hand in the code, or data goes nowhere
Mouseflow	2	"Get started" checklist; MCP server promoted on the start page; detects that the code is installed	starts a 14-day Premium trial without asking; records **nothing** until you click "Activate Tracking" in a banner and confirm that personal data is excluded, although the code is already on the site
Matomo Cloud	3+	tracking code generator with options	the instance URL is derived from the site name (`clicklabprivatrakcom.matomo.cloud`); the site was named "privatrak."; dense admin UI
Cloudflare Web Analytics	4	clear three-step wizard; says "Cloudflare does not track individual visitors" up front	buried under Observability → Analytics → Web analytics; a hostname not on Cloudflare gives a confusing "click here to use … which does not belong to Cloudflare websites"
PostHog	4	token, project ID and region shown clearly; the wizard offers `npx @posthog/wizard`	heatmaps, dead clicks and session replay are each off by default, on three different settings pages among ~60 sections; a persistent "no events yet" banner
Sentry	5	the product picker shows each product's free volume after the trial ("50 replays / mo"); toggling products reconfigures the loader snippet; an agent-handoff prompt is offered first	five screens (agent prompt, repo connect, platform, products, alerts) before the snippet
Google Analytics 4	7	–	account → property → business details → objectives → data collection; three data-sharing options **pre-ticked**; a Terms dialog with a separate GDPR DPA checkbox; the install code is now a Google tag container (`gtm.js?id=GTM-…`), not the `G-…` measurement ID most guides describe
Simple Analytics	–	–	adding the domain failed with an error; dropped from the lab

Privatrak's row describes its current setup (since 15 Nov). When the lab was set up on 14 Nov it took 6 steps: allowed domains and a heavy privacy step were asked during setup, the flow ended on a "You're all set" screen without a snippet, and a key had to be created separately. The flow was changed on 15 Nov: the website key is created with the

project, and the install code follows on the second screen.

6.2 Defaults found and what was set up

Rule: keep every default and write down every change. Everything below was done before the visits it should count. Where a tool's goals are computed over past data, that is noted.

Tool	Timezone default → set	On by default	Set up for the lab
Plausible	Asia/Bangkok (from the browser) → UTC	outbound links, file downloads, form submissions and 404, each with its goal already created	goals Visit /thanks, /pricing, /contact, /checkout (funnel steps must be goals), Plan selected, Purchase as a revenue goal (EUR); property `plan`; funnels Contact and Checkout (sequential). Funnels compute retroactively: the dialog shows last month's conversion while you build it. About 30 clicks
Fathom	UTC	bot blocking; events created by the first `trackEvent` call	nothing: no funnels and no page-view goals. Event currency set to Euro (applies to past data)
Umami Cloud	per-user display preference from the browser (Bangkok); no UTC entry in the list → Atlantic/Reykjavik (UTC+0)	–	goals Visit /thanks, Plan selected, Purchase; funnels Contact and Checkout (60-minute window by default). Goals and funnels are reports over past data. Heatmaps and replays need the Business plan
Pirsch	the setting is "used when the viewer's browser has none", and the select kept showing Bangkok after choosing UTC and reloading. **The domain was found on Asia/Bangkok during the tests**	File Download, Outbound Link Click and 404 arrive on their own	goals Visit /thanks, Plan selected, Purchase (custom metric `revenue`, decimal); funnels Contact and Checkout (steps by path or event, mixed)
Matomo Cloud	Thailand and Thai Baht (from the browser) → UTC, EUR (through Matomo's own API; the form's dropdowns did not take a change from automation)	Ecommerce and site search; the site's URL saved with a trailing dot	goals Visit /thanks, Plan selected, Outbound link (w3.org), File download (.pdf); funnels on Visit /thanks and on the ecommerce order ("Sales"); heatmaps for /lab, /pricing and /; session recording of all visits (1,000 sample limit, 100%). Heatmaps and recordings capture only from the moment they exist
Google Analytics 4	Los Angeles and US dollars (property created from a browser in Thailand) → Iceland time (GA has no plain UTC) and Euro, as recorded at setup. **The property was found on America/Los_Angeles during the tests**: the change did not hold, or applied elsewhere	enhanced measurement (page views, scrolls, outbound clicks and four more); `purchase` a key event	custom dimension Plan; `plan_selected`, `file_download`, `click` marked as key events; `contact_sent` created without code (a `page_view` whose URL contains `/thanks`) and marked as a key event. Creating it pre-selects a default value of 1 US dollar per key event, which had to be switched off. An "Analytics Advisor" popup and an email-preferences dialog with all four boxes pre-ticked appeared on first visits
PostHog	UTC	heatmaps, dead clicks and session replay (switched on during sign-up); web vitals off	funnels are insights over past data: "/pricing → /contact → /thanks" and "/pricing → Plan selected → /checkout → Purchase" (ordered, 1-day window). Purchase a revenue event (property `revenue`, currency from `currency`); base currency left at USD
Mixpanel	US/Pacific → UTC	autocapture, page views, session recording 100% (set in the snippet), rage and dead clicks (`$mp_rage_click`, `$mp_dead_click`)	timezone only; funnels are reports over past data, saved on board "Click lab". The project page's "Usage Statistics" said 0 events while the Events view listed 196 for the day
Amplitude	UTC	currency display USD	nothing at first; funnels are charts over past data ("Contact" saved). Dead Click, Revenue, Purchase and Plan selected exist; no Rage Click event
Microsoft Clarity	–	"smart events" detected from the pages by itself: Submit form, Contact us, later Purchase, Order success, Checkout, Search, Outbound click	funnel Contact by page URL (a page never visited, /thanks, must be typed as a full URL); Checkout funnel on the API event Purchase (two events named Purchase sit side by side in the picker)

Tool	Timezone default → set	On by default	Set up for the lab
Mouseflow	–	recording (after "Activate Tracking")	funnels Contact and Checkout (pages only; Plan selected and Purchase cannot be steps). The page fields are autocomplete boxes that append instead of replacing
Sentry	–	errors; session replay at 100% of sessions (`replaysSessionSampleRate: 1.0` in the loader)	nothing: no goals or funnels. Lab events reach it as breadcrumbs in the replay
LogRocket	–	session replay, rage and dead clicks (no setting for either), "block well-known bots"	conversion funnel charts Contact and Checkout (in order, single session; revenue insight from `revenue` in EUR). Funnels count past sessions. The step pickers take clicks on the wrong field
Cloudflare	UTC	page views and visits only	nothing: no goals, funnels or custom events exist
Privatrak	UTC (from the project wizard)	page views, clicks, form submissions, click problems, scroll depth, time on page	currency GBP → EUR; feature rules File download and Outbound link (clicks by link text; rules apply to past events too); funnels Contact and Checkout; goals Contact form sent, Plan selected, Purchase (value from detail `total`). Funnels count from the day they are created

6.3 Three findings from setup

- **Mouseflow records nothing from headless Chromium**, even with `navigator.webdriver` hidden and an ordinary user agent: its script loads and stops. The same visit in a headed window is recorded. This is why the lab ran person-like and agent-like visitors headed.
- **Plausible drops by reputation.** Plausible answers 202 to every event and sets `x-plausible-dropped` when it throws one away. In the 14 Nov check visit, all 6 events of a repeat buyer from one UK residential IP were dropped. Fresh IPs from the same proxy pool (T-Mobile US, Deutsche Telekom) were accepted. Of the pilot's ~28 VPN and server visits, Plausible kept 3.
- **Fathom misplaces Singapore.** Fathom put the pilot's NordVPN Singapore visits in Brazil (7 visitors). ipinfo said Singapore and Mouseflow said Thailand. In the dashboard test, Fathom listed Brazil 20 first for 17-18 Nov, which most likely has the same cause.

6.4 The setup audit after the first day of r2 (15 Nov)

Every tool was checked again against the planned goals and funnels:

- **Complete:** Plausible, Umami and Matomo.
- **Set up in the audit:** Privatrak, LogRocket and GA4 had been missed in the first pass.

Funnels saved on 15 Nov, with day-1 numbers. The ground truth for 15 Nov was 3 contact forms sent and 3 orders, plus the 14 Nov check visit's 1 form and 1 order.

Tool	Contact	Checkout
Privatrak	16 → 3 → 3 (15 Nov)	16 → 2 → 2 → 1 (split sessions, below)
PostHog	13 → 2 → 1 persons (7 days)	13 → 3 → 3 → 3
Mixpanel (board "Click lab")	18 → 3 → 2 (30 days)	18 → 3 → 3 → 3
Amplitude	16 → 3 → 1 (30 days)	16 → 3 → 3 → 3
GA4 (explorations)	23 → 6 → 4 (28 days)	23 → 4 → 4 → 4
LogRocket	13 → 1 → 1 (last day)	built, with revenue insight in EUR
Mouseflow	0 conversions (30 days of recordings)	pages only, 1 conversion
Umami	set up before day 1	11 → 3 → 3 → 3 (24 h)
Pirsch	set up before day 1	21 → 5 → 5 → 4 (7 days)

Privatrak's undercount was the lab, not Privatrak. Privatrak's database, which we run, read in read-only mode, showed why: the buyers' page views sat in one session and their clicks, form submissions and Purchase events in another. That led to finding r2's user-agent split (chapter 4.1), which affects every IP+UA tool. Clarity had excluded 49 sessions as bots that day.

Other observations from the audit:

- Fathom's "Last 7 days" view lagged behind its "Today" view (11 against 46 visitors).
- Pirsch's goals settings page listed every goal with "0 Visitors, 0% CR" while the dashboard showed conversions.
- Mixpanel saves a report only into a board.
- GA4's funnel steps cannot filter `page_view` by a parameter before that parameter appears in processed data.

6.5 Connecting the MCP servers (19 Nov)

Every server went into one Claude Code folder (local scope), so each was connected the same way and asked by the same assistant. **Steps** here counts what a person has to do, from "I want my assistant to read this tool" to a connected server.

Tool	What it took	Steps	Friction
Privatrak	`claude mcp add` with the URL, OAuth sign-in, pick the project at consent	2	–
PostHog	URL + OAuth	2	first connect timed out once
Mixpanel	URL + OAuth; the URL depends on the data region (EU)	2	the US URL for an EU project would fail
Sentry	URL + OAuth	2	answers no web-analytics questions
LogRocket	URL + OAuth	2	pricing lists MCP from the Core plan; the free plan allowed it
Cloudflare	URL + OAuth, choosing permissions	2	no Web Analytics server: the generic Cloudflare API server, which can change anything the token allows; the assistant writes GraphQL
Microsoft Clarity	local `npx` server; sign-in on first use (README) or a Data Export token (Learn page)	2	the two official pages disagree on auth; last 1-3 days only, 10 requests per day; the sign-in opened in two browsers
Matomo Cloud	enable "MCP Server" as superuser (Administration → System → General settings), create an auth token, add the URL with `Authorization: Bearer`	3	off by default; the docs don't name the header (the 401 does); Claude's apps need an OAuth client instead
Plausible	create a Stats API key; add Sentry's community server with the key as a header	2	no official server; the Stats API is a Business feature (works in the trial)
Pirsch	create an OAuth client (ID and secret, read access); run a community server locally	2	no official server; access keys (`pa_`) do not work
Google Analytics 4	see below	11	by far the most
Umami, Amplitude, Mouseflow	not possible on our plans (Umami Pro, Amplitude Enterprise or the Plus add-on, Mouseflow Premium)	–	Mouseflow promotes its server on the free plan's start page
Fathom	the community server has 3 tools (account, sites, current visitors)	–	skipped: it cannot answer the questions

GA4's official server is local only (`analytics-mcp` on PyPI). Google's guide lists six steps. In practice, from a Mac without the tools, it took eleven:

1. Install `uv`.
2. Install the Google Cloud CLI.
3. Run `gcloud auth login`.
4. Run `gcloud auth application-default login` with the Analytics scope. **Refused:** "This app is blocked. This app tried to access sensitive info in your Google Account." Google blocks its own gcloud client for that scope on this Workspace account. The guide mentions `--client-id-file` without saying it is needed.
5. Create a Google Cloud project.

6. Enable the Analytics Admin API and the Analytics Data API.
7. Configure an OAuth consent screen (Internal).
8. Create an OAuth client of type "Desktop app" and download its JSON.
9. Log in again with `--client-id-file`.
10. Set the quota project. **Failed** with `SERVICE_DISABLED` for the Cloud Resource Manager API, a third API the guide does not name. Enabled it, then it worked.
11. Run `claude mcp add` with two environment variables (credentials path, project ID) and `uvx --python 3.12 analytics-mcp`.

About 25 minutes with one dead end, against 2 steps for the hosted servers.

Connection check. One read-only listing call per server, with Clarity left out to save its 10 daily calls. All ten worked. The names the lab carries in each tool differ ("Click lab", "Test", "privatrak.", "Default project", "Privatrak"). Several are the tool's own default name, so an assistant has to be told which project to read.

6.6 What each vendor documents about its MCP server

Checked on 19 Nov 2026 against the vendors' own documentation.

Tool	Official?	Hosted / local	Auth	On our plan?	Read / write
Privatrak	yes (ours)	hosted	OAuth by URL, or API key	yes	read and setup; setup runs with undo
Google Analytics 4	yes	local (`analytics-mcp`)	Google Application Default Credentials	yes (needs a Google Cloud project)	read-only by default; 3 write tools behind `--allow-write`
Plausible	no, community (Sentry's, listed in Plausible's docs)	hosted or local	Stats API key as Bearer	yes in the trial (Business feature)	read-only
Fathom	no, community	local	API token	probably	read (3 tools)
Simple Analytics	yes	hosted	OAuth	yes, every plan including Free	read and write (53 tools)
Umami Cloud	yes (since 2026-09-10)	hosted or local	Cloud API key	**no**: Pro and up	read-only, 23 tools
Pirsch	no, community (listed in Pirsch's docs)	local	OAuth client ID and secret	API on all plans	read-only, 3 tools
Matomo Cloud	yes	hosted on the instance	OAuth client or auth token	yes (superuser must enable)	read by default; writes if allowed
Cloudflare	yes, but generic (whole Cloudflare API)	hosted	OAuth or API token	yes	read and write (any API call)
PostHog	yes	hosted	OAuth or personal API key	yes	read and write; read-only switch
Mixpanel	yes	hosted (US, EU, IN URLs)	OAuth	yes for free accounts created after 2026-08-01	read and write, 73 tools
Amplitude	yes	hosted (US, EU)	OAuth	**no**: Enterprise, or Plus as an add-on	read and write
Microsoft Clarity	yes	local (`npx`)	OAuth (README) or Data Export token (Learn page)	yes	mostly read; topic insights write
Mouseflow	yes	hosted; legacy local	Mouseflow login	**no**: Premium and up	read-only, 21 tools
Sentry	yes	hosted	OAuth	yes ("MCP access" on Developer)	read and write (issue triage)
LogRocket	yes	hosted	OAuth or project API key	unclear in pricing; worked on Free	9 query tools

7. Dashboard answer test (20 Nov)

The ten questions of the MCP test (chapter 8), about 17 and 18 Nov in UTC days, asked in each tool's own dashboard on 20 Nov, 04:30-06:40 UTC, the lab's last day. Scoring (verdicts, steps, findability 1-5) is defined in chapter 3.9; expected numbers are each tool's delivered visits (chapter 5.2).

Three rounds.

- The first covered Privatrak and Google Analytics, the second the other nine of the MCP test's tools.
- A third round (05:55-06:40 UTC) finished Mixpanel and LogRocket and added three of the four lab tools that are not in the MCP test: Fathom, Amplitude and Mouseflow.
- Umami seemed signed out all along, but wasn't: Umami Cloud's start page (`cloud.umami.is`) and `/settings` send you to the login page even when you are signed in. The dashboard at `cloud.umami.is/analytics/us/…` opens without a new login. It was asked last.

One stray visit on 20 Nov. At about 05:01 UTC, clicking the site's name in Cloudflare's site list opened clicklab.privatrak.com itself in a new tab. It was closed at once, but it is a real visit (Chrome on macOS, no `#r=` label). LogRocket shows it as a 1-event session from Thailand. It falls on day 4, not 17-18 Nov.

7.1 How it ran

- Each question was answered from the tool's start page, the way a person would, using the tool's own reports. Where a question needed a report that didn't exist yet, it was built and named `UI test: …`.
- **Steps** are the screens and clicks from the start page to the number.
- **Findability** is scored 1-5 as defined in chapter 3.9. Each score under 5 says why.
- **Expected numbers** are the per-tool delivered visits from the MCP test's ground truth (requests to that tool answered 2xx).
  - Privatrak: 72 visitors (71 person-days plus the unknown visitor) and 200 page views (199, one lost at a visit's end, plus two not in the records; checked event by event, chapter 5), funnel 23 → 4 → 4, 4 downloads, 7 outbound clicks, 5 views of `/templates`, 7 purchases for 56 EUR, "Duplicate form" 4 rage clicks and 7 dead clicks.
  - GA4: see below. Its property runs on Los Angeles time, so its "17-18 Nov" is a different window.

7.2 At a glance

✓ answered and close to the expected number · ≈ answered, but another metric, another window or a gap · ✗ answered and wrong · – the tool cannot answer · `·` not checked (time). The number after each mark is findability (1-5).

Tool	Q1 visitors, views	Q2 sources	Q3 France	Q4 time on /article	Q5 funnel	Q6 PDF	Q7 outbound	Q8 rage/dead	Q9 404	Q10 purchases, revenue
Privatrak	✓ 5 (views 3)	✓ 5	–	≈ 4	✓ 5	✓ 4	≈ 4	✓ 5	✓ 4	✓ 5 (revenue ≈ 2)
Plausible	✓ 5	✓ 5	✓ 4	✓ 4	≈ 4	✓ 5	✓ 5	–	✓ 5	✓ 5
Pirsch	≈ 4	✓ 5	✓ 4	✗ 3	✓ 4	≈ 5	✓ 5	–	✓ 5	✓ 5 (revenue ≈ 2)
Matomo	≈ 4	≈ 4	✓ 4	✗ 4	≈ 4	≈ 5	≈ 5	–	≈ 4	≈ 4
PostHog	≈ 4	✓ 4	✓ 4	✓ 2	≈ 4	✓ 2	≈ 4	≈ 4	✓ 3	✓ 2
Mixpanel	✓ 3	≈ 3	✓ 3	–	≈ 4	✓ 3	≈ 3	✓ 3	✓ 3	✓ 3
GA4	≈ 4	≈ 3	≈ 4	≈ 3	≈ 2	≈ 3	≈ 3	–	≈ 4	≈ 3
LogRocket	✓ 3	≈ 2	✓ 3	–	≈ 3	✓ 3	✓ 3	≈ 3	✓ 3	≈ 3
Cloudflare	✓ 4	✓ 4	✓ 4	–	–	–	–	–	✓ 3	–
Sentry	–	–	–	–	–	–	–	≈ 4	–	–
Clarity	≈ 4	≈ 3	✗ 4	≈ 2	≈ 4	–	≈ 4	≈ 3	≈ 4	≈ 4
Fathom (no MCP)	≈ 5	✓ 5	≈ 4	–	–	–	–	–	✓ 5	✓ 5

Tool	Q1 visitors, views	Q2 sources	Q3 France	Q4 time on /article	Q5 funnel	Q6 PDF	Q7 outbound	Q8 rage/dead	Q9 404	Q10 purchases, revenue
Amplitude (no MCP on our plan)	≈ 4	≈ 2	≈ 2	✗ 3	≈ 3	✓ 2	≈ 2	≈ 2	≈ 4	✓ 2
Mouseflow (no MCP on our plan)	≈ 5	–	≈ 4	≈ 4	✗ 4	·	·	≈ 3	≈ 4	≈ 3 (revenue –)
Umami (no MCP on our plan)	✓ 5	✓ 4	✓ 4	✗ 4	✓ 5	–	–	–	✓ 4	✓ 5 (revenue 3)

Per-tool expected numbers (delivered visits 17-18 Nov UTC; upper bounds for consent-gated tools; the three page loads not in the records can add up to 2 visitors and 7 page views, chapter 5):

Tool	Person-days	Page views	France	Funnel	PDF	Outbound	404	Purchases
Plausible (non-Chromium only)	26	71	2	5 → 1 → 1	3	4	3	3
Pirsch	68	194	11	22 → 4 → 4	4	6	5	7
Matomo	58	150	9	19 → 3 → 3	3	4	4	5
PostHog	50	126	7	13 → 2 → 2	4	4	4	3
Mixpanel	52	138	7	18 → 2 → 2	3	3	4	5
LogRocket	67 (97 visits)	192	11	22 → 4 → 4	3	5	5	7
Cloudflare	95 visits	190	18 visits	–	–	–	5	–
Sentry	77 visits	146	13 visits	–	–	–	4	5
Clarity	84 visits	176	14 visits	22 → 4 → 4	3	4	5	7
Fathom	68	194	12 (19 visits)	22 → 4 → 4	4	6	5	7
Amplitude (consent)	60	164	10	20 → 4 → 4	3	3	5	5
Mouseflow	58 (82 visits)	165	9	16 → 3 → 3	3	5	5	5
Umami	66 (83 visits)	164	11 (15 visits)	20 → 3 → 3	2	4	4	7

GA4's row is ≈ for the same reason as in the MCP test: the interface has no way to choose UTC days. Against its own window its numbers are close (below).

7.3 Privatrak

The start page is the Overview, with a date picker at the top right. Picking 17 → 18 Nov took two clicks. The range carries over when you move through the sidebar. Opening a report by its URL resets it to the last 7 days.

- **Q1 Visitors 72, page views 200** (expected 72 and 200).
  - Visitors are a key number on the Overview: 1 screen, 2 clicks.
  - The page-view total is not on the Overview: Insights gives it (a count of page views over the range), and the Pages list's 15 rows add up to the same 200. Findability 3: a query to build, or a column to add up.
- **Q2 LinkedIn 11, Google 8, DuckDuckGo 7, Product Hunt 7, direct 6** (expected LinkedIn 11, then 8 each; direct 26, see below). This is the Overview's "Top sources" card, the same screen as Q1.
  - "Direct or unknown 6" is low against 26 because Privatrak counts a visitor's source from their first page view of the day. Most lab visits came with a referrer, and the "direct" personas returned on other days with one.
  - The MCP answer gave the same 6.
- **Q3 not possible:** no geodata, by design.
- **Q4 `/article` 1m 1s** (77 s wall-clock time per view expected). This is the Time on page column in Pages: 1 click. Findability 4: the page doesn't say this is active time (tab visible, recent input), only the docs do. That is why it is shorter than the time between page views.
- **Q5 Contact funnel 24 → 4 → 4** (23 → 4 → 4; the new-tab link from `/lab` adds one to the first step). Funnels → Contact: 2 clicks. The funnel detail follows the selected range.
  - The funnel *list* does not: it shows each funnel's own 31-day window (Contact: 75 entering, 16 completing), with no label saying so. That is easy to misread as the selected period.

- **Q6 File download 4** (4) and **Q7 Outbound link 6: ≈** (7: one Firefox visit lost its leave-time send, known from day 2). Both are in the Overview's "Top features" card. Findability 4: they show only because features with those names were set up before the series. With no setup, the clicks are in Events but not named.
- **Q8 "Duplicate form": 7 no effect, 4 repeated clicks** (7 dead, 4 rage). This is the Overview's "Click problems" card, same screen. Findability 5: the element is named by its text, with the page.
- **Q9 `/templates` 5 views** (5). In Pages. Findability 4: nothing marks the page as a 404, so you have to know the path. That is the gap noted for the product (404 detection).
- **Q10 Purchase 7** (7), in the Overview's "Top features". **Revenue 56** (56 EUR) only through Insights: Show → Sum → detail `total` → Run → "Single value", 6 clicks, no currency shown. Findability 2.
  - The Purchase goal has no value set, so Sources shows "–" for revenue. Choosing a detail as the value would count only from today, not 17-18 Nov.
  - Sources with the Purchase goal shows conversions only on rows with a source (1 each for LinkedIn, Product Hunt, direct and Bing = 4). The 3 others did not land on a row there.

7.4 Google Analytics 4

The property is on America/Los_Angeles, and every report and exploration uses the property's day. "17-18 Nov" is therefore 17 Nov 08:00 UTC to 19 Nov 08:00 UTC. That window includes day 3's visits (19 Nov, 06:05 UTC) and the manual round (19 Nov, 07:12-07:20 UTC, from Thailand). It leaves out day 1's main round (17 Nov, 05:00-06:30 UTC).

The expected numbers for that window come from the manifest: 38 delivered visits, 23 personas, 92 page views. The manual round adds 3-4 users and about 17 page views.

- **Q1 28 active users, 105 views** (about 26-27 users and about 109 page views). Reports → Engagement → Pages and screens, then a custom range: 4 clicks. The Events report says 30 "total users" for the same range: two user counts on neighbouring screens. Findability 4.
- **Q2 Sessions by source: google 7, linkedin.com 7, (direct) 6, reddit.com 4, bing 3.** Reports → Acquisition → Traffic acquisition, then switch the table's dimension from "Session primary channel group" to "Session source": 5 clicks. Findability 3: the default table shows channel groups (Organic Social 17, Organic Search 10), and the source is one dimension switch away.
- **Q3 France 4 active users.** Reports → User → Demographic details: 3 clicks. Thailand 3 is the manual round, which confirms the window. Findability 4.
- **Q4 `/article` 1m 07s.** This is the "Average online active user engagement time" column in Pages and screens: engagement time per active user, not per view (11 users, 16 views; 77 s wall-clock per view expected). Findability 3: the metric name doesn't say per user, and there is no time-on-page metric.
- **Q5 13 → 1 → 1 active users** (window: 14 → 1 → 1 from the manifest, plus up to 4 manual `/pricing` visits).
  - The existing exploration "Contact" was on the last 28 days, and changing its range would have saved over it. So a new one was built: Explore → Funnel exploration template → rename → date → edit steps.
  - Each step: remove the template's event, search "page path", pick "Page path and screen class", add filter "contains /pricing", rename the step.
  - Then remove the template's fourth step and apply. About 30 clicks.
  - Findability 2: funnels exist only as explorations, not reports, and the steps can't be typed as paths.
- **Q6 file_download 1, Q7 click 2.** Reports → Engagement → Events, page 2 of the table: 3 clicks. The rows give counts only. Seeing that the clicks went to w3.org or the PDF needs the event's parameters (`link_url`), one drill-down further. Findability 3. The window expects 2 downloads and 3 outbound clicks.
- **Q8 not possible:** GA4 records no rage or dead clicks.
- **Q9 `/templates` 3 views** (3). In Pages and screens. Findability 4: no 404 marker, but the page title column would show "Page not found".
- **Q10 purchase 3, total revenue $26.44.** In Events (and on the Home page's "Purchases" card for the default range). The window expects 5 purchases.
  - The site sends EUR. GA4 shows revenue in the property's currency (USD), converted: 3 × 8 EUR = 24 EUR ≈ $26.44.

- Findability 3: the number is there, but in another currency without a word about it.

7.5 Plausible

The site dashboard takes a custom range (`period=custom&from=…&to=…`) and is on UTC. Everything is on one page in tabbed boxes, so most answers are one click from the start page.

- **Q1 31 unique visitors, 31 visits, 77 page views** (expected 26 person-days and 71 page views; only the non-Chromium visits are kept). The top row of the dashboard. Findability 5.
- **Q2 Direct 5, Google 5, LinkedIn 4, DuckDuckGo 3, Perplexity 3.** The Sources tab, 1 click. The default tab is Channels (Organic Social 10). Findability 5.
- **Q3 France 2** (2). The Countries tab of the map box. Findability 4: the box opens on the map.
- **Q4 `/article` 1m 06s** (79 s wall-clock). Expand Top pages to get the Time on page and Scroll depth columns. Findability 4: the columns are only in the expanded view.
- **Q5 8 → 1 → 1, "3-step funnel, sequential".** From the Funnels drop-down in the goals box, the existing "Contact" funnel. Findability 4.
  - 8 is the number of visitors with a `/pricing` view; the expected 5 counts only the funnel-shaped visits, so it is ≈.
- **Q6, Q7, Q9, Q10 in the Goals tab, one click:**
  - File Download 3 (3), Outbound Link: Click 4 (4), 404 3 (3).
  - Purchase 3 (3) with **revenue €24.0**, average €8.0. Findability 5 each.
- **Q8 not possible:** no rage or dead clicks.
- Operating systems says "Mac 31, 100%". Most likely all the WebKit and Firefox personas Plausible kept use macOS user agents. This wasn't checked against the manifest.

7.6 Pirsch

No UTC days in the UI. The dashboard uses the domain's timezone (Asia/Bangkok). The range picker has date fields, and Start/End Time fields only for a single day. URL parameters were rewritten to one day. So "17-18 Nov" here is 16 Nov 17:00 to 18 Nov 17:00 UTC, which leaves out the before-midnight visits of 18 Nov. The MCP server took `timezone=UTC`, so its answers were UTC days.

- **Q1 62 visitors, 193 page views, 77 sessions** (UTC: 68 person-days, 194 page views). The top row. Findability 4: the timezone is not shown, only the hourly chart's peak at "12:00 PM" gives it away.
- **Q2 LinkedIn 10, Google 9, DuckDuckGo 7, Hacker News 7, Reddit 7, producthunt 7, Direct / None 6.** The Referrers box, no click. Findability 5.
- **Q3 France 11** (11). The Countries box. Findability 4.
- **Q4 `/article` 18m 16s: wrong** (77 s). Expand the Pages box to get the Time on page column.
  - It is the MCP's 1,096 s exactly, so the error is Pirsch's data, not the server. `/thanks` shows 16m 20s and `/search` 15m 0s too.
  - Findability 3.
- **Q5 Pricing 23 → Contact 4 → Thanks 4** (22 → 4 → 4). Funnels → Contact, 2 clicks. This works in the UI, while the MCP server's `funnels` metric answered "not found" twice. Findability 4.
- **Q6 File Download 3** (4), **Q7 Outbound Link Click 6** (6), **Q9 404 Page Not Found 5** (5), **Q10 Purchase 7** (7). All in the Events box, no click. Findability 5.
  - **Revenue:** only as event metadata. Expand Events → Purchase → `revenue` shows the value "8" on 7 events, so the total (56) is your own multiplication. Findability 2.
  - A click on an event name sets a dashboard-wide filter that follows you to the Funnels page.
- **Q8 not possible.**

7.7 Matomo Cloud

A range is `period=range&date=2026-11-17,2026-11-18` in the URL, or the calendar. The site is on UTC.

- **Q1 49 visits, 103 page views.** Visitors → Overview, 1 click. Findability 4: unique visitors are not offered for a range. Matomo counted 49 of the 78 visits it was sent, as in the MCP test.
- **Q2 Channel types: Social Networks 17, Search Engines 13, Direct Entry 7, AI Assistants 6, Campaigns 6.** Referrers: "Keyword not defined" 13, then LinkedIn 7.
  - Acquisition → All Channels. The UI shows direct entry as its own row, where the MCP assistant had to infer it as a remainder.
  - Findability 4: the search engines hide behind the keyword row.
- **Q3 France 10 visits** (9 person-days expected; 13 visits delivered). Visitors → Locations. Findability 4.
- **Q4 `/article` 00:03:55 = 235 s: wrong** (77 s). Behaviour → Pages.
  - `/thanks` shows 17:33 and `/templates` 8:38, so Matomo's time on page runs long here.
  - `/article?ref=producthunt` is a separate row: query strings are not stripped by default.
  - Findability 4.
- **Q5 14 → 1 → 1.** Funnels → "Visit /thanks", 2 clicks (19 → 3 → 3 delivered). Findability 4.
- **Q6 downloads 2, Q7 outlinks 1** (3, 4). On the Visits Overview and as goals. Findability 5.
- **Q9 `/templates` 2 views** (4). Findability 4.
- **Q10 4 orders, €32.** Ecommerce → Overview. Findability 4. MCP: the same.
- **Q8 not possible:** heatmaps exist, but no rage or dead clicks per element.

7.8 PostHog

Web analytics takes `date_from`/`date_to` and is on UTC.

- **Q1: two answers on one screen.**
  - The headline tiles say 39 visitors, 76 page views, 40 sessions.
  - The tables below the tiles add up to 41 visitors and 106 page views (Paths and Device type). A trends insight agrees with the tables: 106 `$pageview`, 41 unique users.
  - 38 personas and up to 126 page views were delivered.
  - Findability 4. The headline is what a person reads first, and it is the lower one.
- **Q2 $direct 14, linkedin.com 7, duckduckgo.com 6, google.com 5, perplexity.ai 4.** Switch "Sources by Channel" to Referring domain. Findability 4.
- **Q3 France 6** (7 person-days). Switch "Geography by Map" to Countries. Findability 4.
- **Q4 59.44 s.** Not in web analytics or the page report.
  - Only a trends insight gives it: average of `$prev_pageview_duration` on `$pageleave`, filtered to `/article`. The MCP's first number was the same.
  - Findability 2.
- **Q5 11 → 0 → 0.** The saved "MCP test: contact funnel" insight with a fixed 17-18 Nov range (not saved). PostHog has no `/contact` or `/thanks` page view on those days, as the MCP test found. Findability 4.
- **Q6 3** autocapture clicks on the checklist link, via a trends insight. Findability 2.
- **Q7 w3.org 2 clicks.** The page report for `/article` has an Outbound Clicks table. Findability 4.
- **Q8 page level only:** "Frustrating pages" shows `/lab` with 3 rage clicks and 11 dead clicks. Element level needs the heatmap toolbar on the site itself. Findability 4.
- **Q9 3** `not_found` events (and 3 views of `/templates`). Findability 3.
- **Q10 3 purchases, revenue 24.**
  - A trends insight summing `revenue` on Purchase. Summing `total` gave 0: the property's name has to be known.
  - Findability 2.

- Nothing was saved. The insights were built from the trends editor and left unsaved.

7.9 Mixpanel

There is no traffic overview: every answer is a report built in Insights. Each one takes the same steps:

- Custom date (the natural-language box understands "Nov 17, 2026 to Nov 18, 2026"; it then offers the range under "Recently applied").
- Pick the event, set Unique users or Total events, and choose "Metric" as the chart type.
- Add a breakdown.

About 6-10 clicks per question. The project is on UTC. Nothing was saved: the report stayed "Untitled".

- **Q1 40 users, 124 page views** (39 personas and 52 person-days, 138 page views delivered). [Auto] Page View as Unique users, then Total events. Findability 3: there is no traffic overview without building a report.
- **Q2 by referring domain: clicklab.privatrak.com 20, (not set) 19, google.com 8, reddit.com 7, linkedin.com 6.**
  - The site itself is the top "source", and direct traffic is "(not set)".
  - There is no source or channel property beside Referring Domain and Initial Referring Domain.
  - Findability 3.
- **Q3 France 5** (7 person-days). Breakdown by Country. Findability 3.
- **Q4 not possible:** autocapture records no time on page.
- **Q5 13 → 2 → 2** (18 → 2 → 2). The day-0 board "Click lab", with the board's date set to 17-18 Nov.
  - Changing a board's date puts the board into edit mode with Save/Cancel. It was cancelled.
  - The MCP assistant built a new funnel and got 13 → 1 → 1.
  - Findability 4.
- **Q6 3 clicks on `/mapleform-checklist.pdf`** (3) and **Q7 1 click on `https://www.w3.org/WAI/tutorials/forms/`** (up to 3).
  - [Auto] Element Click, broken down by "[Auto] Link target", whose description says it is the element's `href`.
  - The property list offers no "href" or "text": searching "href" finds nothing, so you have to know the link's address is called "Link target".
  - Findability 3.
- **Q8 by element ID:** [Auto] Dead Click: `b` 11, `a` 4, (not set) 17. [Auto] Rage Click: `b` 1.
  - `b` is the "Duplicate form" button. There is no text or selector property, so the ID is the only way to tell elements apart.
  - The counts cover all pages: there is no /lab filter without adding one.
  - Findability 3.
- **Q9 3 views of `/templates`** (up to 4). [Auto] Page View broken down by Current URL, filtered in the table's search. The URLs in that table are live links to the site and were not clicked. Findability 3.
- **Q10 5 purchases, sum of `amount` 40** (5, 40 EUR). The Purchase event, then Aggregate Property → Sum → `amount`, with no currency. Findability 3.
- **Mixpanel's home page says "No users seen in the last week" and "No events found"**, with lab events arriving all week. It reads like an empty project.

7.10 LogRocket

The session list is the analytics tool.

- Session Replay has its own timezone switch (GMT+7 or UTC) and a custom range.
- Each "Add Session Filter" gives the matching session count ("Showing 1-10 of N").
- The filter goes into the URL, so a question is one filter.

The dashboards are less useful: their KPI tiles show only the last day of the range, and they have no totals.

- **Q1 97 sessions** (97 visits: exact). The session list with 17-18 Nov in UTC. There is no visitor count and no page view total. Findability 3.
- **Q2 one source at a time:** "Referrer URL contains linkedin" gives 11 (11). There is no list of sources to rank. Findability 2.
- **Q3 France 18 sessions** (18 visits: exact). Filter Country is France. Findability 3.
- **Q4 not possible:** only "Average Session Duration" on the Analytics dashboard. Time on page exists only as a condition inside "Visited URL" (default "time on page greater than 1 s").
- **Q5 per page:** visited `/pricing` 25, `/contact` 4, `/thanks` 4 sessions (22 → 4 → 4). An ordered funnel would need a Conversion Funnel chart, which wasn't built. Findability 3.
- **Q6 3** sessions clicked text containing "checklist" (3) and **Q7 5** clicked "forms tutorial" (5). Filter Clicked, by text: you need the link's text, not its URL. Findability 3.
- **Q8 Dead Clicked "Duplicate form": 7 sessions** (7 visits). **Rage Clicked (any): "No sessions found"** (4 rage visits sent). Findability 3.
- **Q9 Visited URL contains `/templates`: 5** (5). Findability 3.
- **Q10 7 sessions** visited `/order-complete` (7). The revenue (the `revenue` property on the Purchase event) has no sum in the session list. Findability 3.
- The "Most Rage Clicked Elements" widget on Home says "No data found" for the same days.
- **Visitors are labelled by city, and one session by its full IP address** (in the sessions list). Sentry does the same. See below.

7.11 Fathom (no MCP comparison)

Fathom has only a community MCP server with three tools (account, sites, current visitors), which cannot answer any of the questions, so there is no MCP answer to compare with.

The account has one site, named "Privatrak", which is the lab site. The date picker sets `from=2026-11-17 00:00:00&to=2026-11-18 23:59:59` in UTC. Everything is on one page.

- **Q1 71 site visitors, 174 page views** (68 person-days, 194 page views). Findability 5. Page views are 20 short of what was delivered.
- **Q2 Direct / Unknown 19, LinkedIn 11, Google 8, DuckDuckGo 7, news.ycombinator.com 5** (direct 25, LinkedIn 10, DuckDuckGo 8). The Referrers tab (the box opened on "AI"). Findability 5.
- **Q3 France 15** (12 person-days, 19 visits). The Countries box.
  - It lists **Brazil 20 first**, though no persona was set in Brazil. This wasn't checked against the exit IPs.
  - Findability 4.
- **Q4 not possible:** only "Avg time on site 00:59", no time per page.
- **Q5 not possible:** no funnels.
- **Q6, Q7 not possible as set up:** Fathom counts only events the site sends, and the lab sends Fathom only Plan selected, Purchase and 404.
- **Q8 not possible.**
- **Q9 "404: /templates" 5** (5). The Events box. Findability 5.
- **Q10 Purchase 7, value €56** (7, 56 EUR). Findability 5.

7.12 Amplitude (no MCP comparison)

Amplitude's MCP server needs Enterprise or the Plus add-on, which our plan doesn't have.

The login opens on app.amplitude.com, not the EU host. Marketing Analytics has a ready web dashboard. Its date picker shows "UTC+00:00", and the URL takes the UTC range.

Amplitude records only after consent, so the expected numbers are upper bounds.

- **Q1 39 visitors, 54 sessions, 131 page views** (up to 60 person-days and 164 page views). Traffic by Channel and Page Engagement. Findability 4.

- **Q2 Default channels: Organic Search 13, Organic Social 13, Direct 9.**
  - The dashboard's breakdown offers only Default Channels.
  - Sources need a chart grouped by `referring_domain`. Summed over the two days: (none) 8, LinkedIn 7, Google 7, Reddit 6, DuckDuckGo 6.
  - Findability 2.
- **Q3 France 8** (5 on 17 Nov + 3 on 18 Nov, unique users per day; up to 10 person-days). Chart grouped by Country. Findability 2.
- **Q4 `/article` "Time Spent Per Page" 18m 45s: wrong** (73 s). Page Engagement, per page path. `/search` 15m 3s and `/templates` 8m 37s show the same inflation. Findability 3.
- **Q5 15 → 1 → 0** (up to 20 → 4 → 4). The saved "Contact" funnel chart, with its date changed to 17-18 Nov and not saved. Findability 3.
- **Q6 3** "Download the checklist (PDF, 2 KB)" (3) and **Q7 2** "forms tutorial" (up to 3). Element Clicked grouped by Element Text, in a new chart. Findability 2.
- **Q8 Dead Click by Element Text: Duplicate form 5, Delete form 2, Save draft 2, Publish form 1.** Up to 6 dead "nothing" visits were sent.
  - There is no rage click event to choose.
  - Findability 2.
- **Q9 `/templates` 3 page views** (5). Page Engagement. Findability 4.
- **Q10 Purchase 5, revenue 40** (5, 40 EUR). The Revenue event, Sum of Property Value on `$revenue`. The property first defaulted to `$currency`, which gives 0. Findability 2.
- **Charts have no total column:** a breakdown shows a "Row Average" and the two days, so every total is added up by hand.

7.13 Mouseflow (no MCP comparison)

Mouseflow's MCP server needs the Premium plan, which ours isn't.

The site's tile in "Manage My Sites" links into the tool. The date picker writes `fromdate`/`todate` into the URL.

- **Q1 40 visitors, 55 sessions, 111 page views** (82 visits, 165 page views delivered). The dashboard's top row. Findability 5. It counts only recorded sessions.
- **Q2 not found:** the dashboard's "Visitor sources" section has only Average Visit Duration.
- **Q3 France 5** (9 person-days). "No. of Visitors by Country" is a bar chart without numbers, read off the bars. Findability 4.
- **Q4 `/article` visit time 47.3 s, engagement 43.1 s** (77 s). The Heatmaps list. Findability 4.
- **Q5 Contact funnel 0 (0%)** (16 → 3 → 3): no `/contact` or `/thanks` page view is among the recorded pages. Findability 4.
- **Q8 friction:** "Average click Rage events 0"; dead-click on 2 page views; `/lab` friction score 0.5. Findability 3.
- **Q9 `/templates` 3 views** (5); the friction list counts "404" on 6 page views. Findability 4.
- **Q6 and Q7 not answered.** Mouseflow has no download or outbound-click report. The Heatmaps list counts 12 clicks on `/article`, not split by link. Only the click heatmap of `/article` would show the PDF and w3.org links. Its viewer renders the page itself, so it wasn't opened, to keep stray requests off the lab site.
- **Q10 Purchase tag on 2 recorded sessions, "order placed" on 1, no revenue** (5 purchases delivered, €40). Session Replay → Filters → Tag "Purchase", or Filters → "Order placed | revenue" → Event occurred. Findability 3. The "order placed" session shows `plan=Team` and an `order_id`, but no amount. It counts only recorded sessions, like Q1.
- **Times are UTC:** the session list puts the 17 Nov morning run at 05:xx and the midnight round at 23:44 and 00:06.

7.14 Umami Cloud (no MCP comparison)

Umami's MCP server needs the Pro plan; ours is free.

Getting in. Umami Cloud's start page and its settings page show the login form even when you are signed in. The dashboard URL (`cloud.umami.is/analytics/us/websites/…`) opens without one. The earlier rounds took the login form at face value.

The window. The date picker (Custom range, 17 → 18 Nov) gives UTC days. The hourly bars show the 64 visits of 05:00 UTC on 17 Nov at "5 AM", and the four `/templates` views at the times they were made. The URL, though, carries the browser's midnights (UTC+7): `range:1794848400000:1795021199999` is 16 Nov 17:00 to 18 Nov 16:59 UTC. Rewriting it to UTC midnights shifted the window seven hours later (38 visitors, 99 views, the 19 Nov run included). So: use the picker, never edit the URL.

- **Q1 64 visitors, 71 visits, 166 page views** (66 person-days, 83 visits, 164 page views). The top row of the Overview. Findability 5.
- **Q2 linkedin.com 10, chatgpt.com 7, reddit.com 7, news.ycombinator.com 7, google.com 6, duckduckgo.com 6** (LinkedIn 10, Hacker News, ChatGPT and Reddit 7 each, DuckDuckGo 6: exact). The Sources box, same page.
  - Direct visits aren't in Referrers. The Channels tab next to it shows Organic social 23, Direct 20, Organic search 13, LLM 8, Email 4 (direct 23 delivered).
  - One `app.privatrak.com` referrer.
  - Findability 4: the direct count needs the second tab.
- **Q3 France 12 visitors** (11 person-days, 15 visits). The Location box. Findability 4.
- **Q4 wrong: "Visit duration 0s"** with the filter Path is `/article` (expected 72.8 s mean on 16 views; the 16 views themselves are exact).
  - Umami has no time on page. Visit duration is measured between page views, and 15 of the 16 visits saw only `/article` (bounce rate 94%), so it comes out as 0.
  - Findability 4 for a number that means something else.
- **Q5 Contact funnel 22 → 3 → 3** (20 → 3 → 3). The Funnels page lists the "Contact" funnel built during setup, with the picker's range. Findability 5.
  - The "Checkout" funnel beside it: `/pricing` 22 → Plan selected 7 → `/checkout` 7 → Purchase 7.
- **Q6 and Q7: no answer.** Umami records page views and the events the site sends. It doesn't capture file downloads or outbound clicks by itself, and the lab sends it only Plan selected and Purchase (Events: 7 and 7).
- **Q8: no answer.** No rage or dead clicks. Heatmaps and Replays need the Business plan.
- **Q9 `/templates` 4 views** (4: exact). The Overview with the filter Path is `/templates`. Findability 4: you have to know the path. Umami doesn't mark 404s.
- **Q10 7 orders, €56.00** (7 purchases, €56: exact). The Revenue page.
  - The page opens in USD and shows "$0.00, 0 orders". Only after switching the currency to EUR do the numbers appear. That looks like no revenue, not like a currency filter: findability 3 for revenue.
  - Purchases alone: Events or Goals, findability 5.
  - Revenue per referrer and country comes with it (reddit.com €16, France €16).

7.15 Cloudflare Web Analytics

The time picker is in the browser's timezone, but its absolute range takes times. "17 Nov 07:00 to 19 Nov 07:00 (GMT+7)" is exactly the UTC window (the URL then reads `time=2026-11-17T00:00:00Z/2026-11-19T00:00:00Z`).

- **Q1 95 visits, 196 page views** (95, 190). Web Analytics → "View Web Analytics for all sites". There are no visitors, only visits. Findability 4.
- **Q2 None (direct) 36, google 9, linkedin 9, reddit 8, duckduckgo 8.** The Visits view. Findability 4.
- **Q3 France 19 visits** (18). Findability 4.
- **Q9 `/templates` 5** (5). The Page views view, with the paths list switched from 5 to 15 items. Findability 3.
- Q4-Q8 and Q10 are not possible: no events, time on page or funnels.
- In the site list, the site's name is a link to the site itself, not to its report. That is how the stray visit on 20 Nov happened.

7.16 Sentry

Session Replay takes an exact UTC range (`start`, `end`, `utc=true`).

- **Q8 "Most Dead Clicks: button#b 3, a 1"; "Most Rage Clicks: no results".** These are widgets on top of the replay list: 1 click from the start page. `button#b` is the "Duplicate form" button.
  - It is sampled replays, not all visits (B-nothing: 5 delivered).
  - Findability 4: the element is a selector, not its text.
- **Everything else is not possible:** no traffic, sources, pages, funnels or events. The replay list could be filtered and counted by hand, which is what the Claude Opus run of the MCP test (chapter 8) did.
- The replay list labels each replay by the visitor's full IP address.

7.17 Microsoft Clarity

The dashboard's "Customised" range works in the browser's timezone, but the URL takes millisecond timestamps. With 17 Nov 00:00 UTC to 18 Nov 23:59 UTC the dashboard shows "11/17/2026 07:00 - 11/19/2026 06:59".

- **Q1 112 sessions, 108 unique users, pages per session 1.14** (84 visits, 176 page views delivered). "46 bot sessions excluded". There is no page view total; the Top pages add up to about 128.
  - Clarity has more sessions than visits it was sent. That is the same as the MCP answer (112), so it is Clarity's own sessioning.
  - Findability 4.
- **Q2 clicklab.privatrak.com 43, www.reddit.com 11, www.linkedin.com 10, chatgpt.com 9, www.google.com 8.** The Referrer box. The site's own domain is the top "referrer", and direct is not a row. Findability 3.
- **Q3 France 25 sessions: wrong** (14 visits). Region tab. Findability 4. For 17-19 Nov the MCP gave 29.
- **Q4 not per page:** "Active time spent 19 sec" is for all sessions. A filter to sessions that visited `/article` would still be per session. Findability 2.
- **Q5 Contact: 15 → 0 → 0** (22 → 4 → 4). The Funnels box. Findability 4.
- **Q7 Outbound click 3 sessions** (4), **Q10 Purchase 4 sessions** (7, no revenue). Both under Smart events. Findability 4.
- **Q6 not possible:** no download event.
- **Q8:** Heatmaps → `/lab` → "Dead clicks" (desktop) ranks the paragraph text 3, the chart 1 and "Open pricing in a new tab" 1. "Rage clicks" finds none.
  - "Duplicate form" (11 clicks) is not flagged as dead, though its clicks do nothing.
  - Findability 3.
- **Q9 `/templates` 4** (5). Top pages. Findability 4.

7.18 Dashboard against MCP, tool by tool

- **Privatrak: every number is the same** in the dashboard and through MCP: 72 visitors, 200 page views, LinkedIn 11 and direct 6, 61 s, 24 → 4 → 4, 4 downloads, 6 outbound clicks, "Duplicate form" 7/4, 5 views of `/templates`, 7 purchases for 56. That's expected, since the MCP tools call the same API routes.
  - Revenue takes an insights sum in both: the MCP assistant built the same query.
  - The page-view total comes from Insights in both: the assistant asked insights for the count, as a person would in the dashboard.
- **Plausible: the same numbers, and two answers the server could not give.**
  - The UI shows revenue (€24) where every revenue call through the community server failed on a schema error.
  - The UI has the ordered funnel (8 → 1 → 1), which the Stats API doesn't offer.
- **Pirsch: the funnel works in the UI** (23 → 4 → 4) where the server's `funnels` metric failed.
  - The UI cannot show UTC days (62/193 against the MCP's UTC 64/195).

  - The UI confirms 18m 16s on `/article`: the wrong time on page is Pirsch's data.

- **Matomo: identical** (49 visits, 103 page views, 235 s, 14 → 1 → 1, 2, 1, 2, 4 orders for €32). The UI shows direct entry as a row; the MCP inferred it.
- **Cloudflare: identical** (95 visits, 196 page views, France 19, `/templates` 5). The UI got there in four clicks; the MCP needed hand-written GraphQL.
- **PostHog: the MCP's numbers match the tables, not the headline.** 41 visitors and 106 page views through MCP, in the trends insight and in the web analytics tables. The headline tiles of the same page say 39 and 76.
  - Funnel 11 → 0 → 0, time on page 59.4 s, PDF 3, revenue 24: the same.
- **Mixpanel: identical** (40 users, 124 page views, France 5, the same referring domains, PDF 3, w3.org 1, `b` 11 dead / 1 rage, `/templates` 3, 5 purchases for 40). The saved board funnel says 13 → 2 → 2; the MCP's new funnel said 13 → 1 → 1. The UI took a report per question too, so it is no faster than the server.
- **LogRocket: the UI is exact where the MCP drifted.**
  - The session list with UTC days gives 97 sessions, France 18, LinkedIn 11, funnel pages 25/4/4, PDF 3, outbound 5, `/templates` 5 and 7 purchases.
  - The Sonnet MCP run gave 47 users, 19 sessions from France and a 17-19 Nov funnel. It moved the period in five answers and found no PDF clicks.
  - The Opus run got closer (25 → 4 → 4, PDF 3, outbound 5).
  - Both found dead clicks on "Duplicate form" and no rage clicks.
- **Fathom, Amplitude, Mouseflow: no comparison.** Fathom has no MCP server that answers analytics questions (the community one lists sites and current visitors). Amplitude's needs Enterprise or the Plus add-on, and Mouseflow's Premium; neither is our plan. Umami's needs Pro.
- **Clarity: the UI can do exact UTC days** (through the URL), which its MCP server cannot (last 1-3 days only).
  - Both agree on 112 sessions, no rage clicks and no element for the dead clicks in the dashboard view.
  - Only the heatmap names elements.
- **Sentry: the UI names the element** ("Most Dead Clicks: button#b 3") as a ready widget. The Sonnet MCP run had no per-element counts; the Opus run found `button#b` by going through replays.
- **GA4: the same window, later numbers.**
  - Round 1's MCP answers (19 Nov, 09:25 UTC) used the same Los Angeles days. The counts that matched then still match: downloads 1, outbound clicks 2, `/templates` 3, purchases 3.
  - Users, page views and the funnel's first step are higher in the UI now: 28 vs 26 users, 105 vs 94 views, 13 vs 11 entering. The difference is the manual round. It happened 2 hours before the MCP run and wasn't processed yet. The UI now shows its 3 Thailand users.
  - So a GA4 answer depends on when it is asked, a day after the period ends.
  - The MCP assistant reported revenue as "24 EUR"; the UI shows $26.44.
  - The Opus repeat rebuilt exact UTC days from GA4's hourly data (`dateHour`). In the standard reports a range is whole property days.
- **Timezones in the UIs:**
  - **UTC directly:** Privatrak, Plausible, Matomo, PostHog and Sentry show UTC days.
  - **Exact times allowed:** Cloudflare's picker is in the browser's zone but takes times.
  - **Only through the URL:** Clarity, in the browser's zone. LogRocket's dashboards too; its Session Replay list has a UTC switch.
  - **UTC directly (the third round's tools):** Fathom and Amplitude show UTC. Mouseflow takes days in UTC. Umami's picker gives UTC days, but its URL holds the browser's midnights, so an edited URL is off by the browser's offset.
  - **Not at all:** Pirsch (domain zone) and GA4 (property zone).
- **Personal data on screen:** LogRocket and Sentry show visitors' full IP addresses as labels in their session and replay lists. In the lab these are proxy and VPN exits, not people; on a real site they would be visitors' IPs. None are written here.

7.19 Questions not asked

- **Mouseflow:** Q6 and Q7, only in the click heatmap viewer, which loads the lab page and so wasn't opened. Q2: no source report found on the dashboard.

8. MCP answer test (19 Nov)

Two rounds on 19 Nov. Round 1 (morning, Claude Sonnet): ten fixed questions and one setup task per server. Round 2 (afternoon, Claude Opus, below the per-tool part): a free report without project IDs, the ten questions again, a fuller setup with clean-up, the size of each server in the assistant's context, and Clarity.

How the servers were connected, and what each vendor documents, is in chapter 6. This chapter is what happened when an assistant actually asked them. Every answer of round 1 is quoted in Appendix E, and every report of round 2 in Appendix F.

8.1 How it ran

- **One assistant per server, the same brief.** A headless Claude Code run (`claude -p`, model Sonnet) in an empty working folder, allowed to use only that one server's tools (no files, no web, no shell). 19 Nov, 09:25-09:40 UTC, all runs in parallel (Sentry again alone afterwards). The brief is reproduced below; the raw transcripts are not published.
- **Ten questions about 17-18 Nov (UTC)**, the list in section 3.9: visitors and page views; top sources; visitors from France; average time on `/article`; the contact funnel `/pricing` → `/contact` → `/thanks`; PDF downloads; outbound clicks to w3.org; the element on `/lab` with the most rage and dead clicks; visits to the 404 page; purchases and revenue.
- **Then:** list every tool, split into read and write, and try one harmless setup task where the server can write (the contact funnel, or a goal), every object named `MCP test: …`, nothing existing touched. Sentry and Cloudflare were told not to write (their writes are infrastructure).
- **Difficulty** is the assistant's own score per question: 5 one obvious call, 4 a lookup first, 3 trial and error or interpretation, 2 a raw query language or several failed calls, 1 not possible.
- **Expected numbers** come from the visit records (`visits.jsonl`, chapter 5): per tool, the visits whose requests to that tool were answered with a 2xx, so a tool that never got a visit is not blamed for it. "Visitors" has no single true value: 47 personas over both days, 72 person-days (what a daily-salt tool should count). For tools that need consent the expected numbers are an upper bound (a 2xx can be a config request without a recorded event).

The 10 runs that reached data made 161 calls to their servers and took 43 s (Plausible) to 6.6 minutes (Mixpanel) each.

The brief, as every round-1 session received it

Each session started from this text, with the server's name above it.

> You are testing how well one analytics tool's MCP server answers questions. Use ONLY the tools of the MCP server named above (the tool names start with its prefix). Do not use any other tool, file, website or prior knowledge. Never guess a number: every number you give must come from a tool result. If the server cannot answer a question, say so and why. Do not call any feedback tool (such as send_feedback).
>
> The site is clicklab.privatrak.com, a small test site ("Mapleform"). Its timezone is UTC in every tool.
>
> **Part 1: questions**
>
> Period: 17 and 18 November 2026 (both days together, UTC), unless a question says otherwise. If the server cannot select exactly that period, use the closest it allows and say which period you got.
>
> 1. Visitors (unique visitors / users) and page views over the period, and per day if available.
> 2. Top traffic sources: the top 5 with their visitor (or session) counts, and where direct traffic stands.
> 3. Visitors from France.
> 4. Average time on page (or engagement time) for the page /article.
> 5. Contact funnel: how many visitors reached /pricing, then /contact, then /thanks (in that order). Use a funnel the project already has if there is one; otherwise compute it if the server allows.
> 6. Downloads of the PDF /mapleform-checklist.pdf.

7. Outbound clicks to w3.org (the link https://www.w3.org/WAI/tutorials/forms/).
8. On the page /lab: which element got the most rage clicks, and which the most dead clicks (with counts).
9. Visits to the 404 page (the path /templates does not exist and returns a 404 page).
10. Purchases: how many "Purchase" events and how much revenue (EUR).

For each question record: the answer exactly as the tool reports it, what the number means in this tool (its own definition, e.g. "visitors" vs "sessions"), the tool calls you needed, and a difficulty score for an AI assistant:

- 5: one obvious call with a matching tool and plain parameters
- 4: right tool quickly, but needed a lookup first (e.g. list goals or event names)
- 3: trial and error, unclear tool or parameter names, or results that needed interpretation
- 2: had to build a query in a raw API or query language, or several failed calls
- 1: not possible with this server

Part 2: what the server can do

List all the tools the server offers, split into reading and writing (changing setup or data), in one line each.

Part 3: can it set something up?

[per server: the contact funnel, or a goal for /thanks; Sentry and Cloudflare were told not to write]

Rules for writing: create only new objects whose name starts with "MCP test:"; never change, rename or delete anything that exists; never touch settings, users, billing, keys, DNS, workers or anything outside analytics setup. If the server has no suitable write tool, say so and do not work around it.

Output

First a short plain-text summary (what worked, what did not, anything surprising about the data or the server). Then, as the last thing in your reply, one fenced ```json block exactly in this shape:

{"server": "...", "answers": [{"q": 1, "status": "answered|partial|needs_setup|not_possible|error", "answer": "...", "definition": "...", "calls": 0, "tools_used": ["..."], "difficulty": 5, "difficulty_why": "..."}], "capabilities": {"read_tools": ["..."], "write_tools": ["..."], "notes": "..."}, "setup_test": {"attempted": true, "what": "...", "result": "created|refused|not_supported|error|skipped", "id_or_url": "...", "notes": "..."}, "notes": "errors, limits, data delays, quirks"}

8.2 Results at a glance

✓ answered and close to the expected number · ≈ answered, but another metric, another period or a clear gap · ✗ answered and wrong · – the server cannot answer · E the server failed

Tool (server)	Q1 visitors, views	Q2 sources	Q3 France	Q4 time on /article	Q5 funnel	Q6 PDF	Q7 outbound	Q8 rage/dead	Q9 404	Q10 purchases	Can set up?
Privatrak (official)	✓	✓	–	≈	✓	✓	≈	✓	✓	✓	yes, funnel created, undoable
PostHog (official)	✓	✓	✓	✓	≈	✓	≈	≈	✓	✓	yes, funnel insight created
Mixpanel (official)	✓	≈	✓	–	✓	✓	≈	✓	✓	✓	yes, board with the funnel created
Plausible (community)	✓	✓	✓	✓	≈	✓	✓	–	✓	≈ (revenue E)	no write tools
Pirsch (community)	✓	✓	✓	✗	≈ (E)	≈	✓	–	✓	✓	no write tools
Matomo (official)	≈	≈	✓	✗	≈	≈	≈	–	≈	≈	yes, goal created (raw API)

Tool (server)	Q1 visitors, views	Q2 sources	Q3 France	Q4 time on /article	Q5 funnel	Q6 PDF	Q7 outbound	Q8 rage/dead	Q9 404	Q10 purchases	Can set up?
GA4 (official)	≈	≈	≈	≈	≈	≈	≈	–	≈	≈	no (writes need a flag)
LogRocket (official)	✓	✓	✓	≈	≈	–	–	≈	✓	≈	no write tools
Cloudflare (generic API)	≈	✓	✓	–	≈	–	–	–	≈	–	could change anything (not tried)
Sentry (official)	–	–	–	–	–	–	–	≈	–	–	no analytics writes
Clarity (official, round 2)	≈	≈	✗	≈	≈	–	–	≈	✓	≈	only AI-visibility topics

GA4's row is all ≈ for one reason: its property runs on Los Angeles time, so "17-18 Nov" was a different window (see GA4 below). Against that window its numbers are close.

Tool	MCP calls	Failed calls	Answered / partial / not possible	Avg difficulty (answered)	Time
Privatrak	18	0	8 / 1 / 1	4.1	57 s
PostHog	25	1	9 / 1 / 0	3.4	136 s
Mixpanel	24	0 (2 came back empty)	5 / 4 / 1	3.0	399 s
Plausible	15	3	7 / 2 / 1	4.0	43 s
Pirsch	21	2	8 / 1 / 1	3.9	50 s
Matomo	18	1	8 / 1 / 1	3.9	86 s
GA4	13	1	8 / 1 / 1	3.9	54 s
LogRocket	15	0	3 / 6 / 1	3.4	107 s
Cloudflare	5	1	2 / 2 / 6	2.2	77 s
Sentry	7	0	0 / 1 / 9	2.0	73 s

8.3 What the test shows across tools

- **The server's shape decides more than the tool behind it.** Four shapes:
  - *Typed analytics tools* (Privatrak, Plausible, Pirsch, GA4's `run_report`): one call per question, plain parameters, exact dates. Fastest and cheapest.
  - *A raw query language behind one tool* (PostHog's `exec` with HogQL, Cloudflare's `execute` with GraphQL, Matomo's raw API calls): everything is possible in principle, but the assistant writes queries, guesses field names and retries. PostHog answered all ten this way; Cloudflare's introspection failed and field names were guessed.
  - *Natural-language tools* (LogRocket's `build_metric`, Clarity's `query-analytics-dashboard`): no parameters to get wrong, but the tool rewrites the question. LogRocket moved the period to include 19 Nov in five of ten answers and answered two questions with a question back.
  - *No analytics at all* (Sentry: replays as lists, at most 100, relative periods like `7d` only).
- **Exact periods are not a given.** Exact dates: Privatrak, Plausible, Pirsch (with `timezone=UTC`), Matomo, PostHog, Cloudflare, Mixpanel. Not: GA4 (property timezone, no override), LogRocket (drifted), Sentry (relative only), Clarity (last 1-3 days only).
- **Two lab tools were not on UTC**, against the setup rule "timezone UTC everywhere": the GA4 property is on America/Los_Angeles and the Pirsch domain on Asia/Bangkok. Pirsch's API takes a timezone per query, so the MCP answers were UTC anyway; GA4's cannot. This matters for the dashboard test (chapter 7) too: GA4's "17 Nov" is 17 Nov 08:00 UTC to 18 Nov 08:00 UTC.
- **Event names had to be discovered** in every tool with custom events (goal or event lists first, then the property that holds the URL). Where a server has no list tool (Plausible, LogRocket) the assistant breaks down by goal or guesses; LogRocket could not find the download at all.

- **Revenue is the weakest answer.** Correct in Privatrak, Pirsch, PostHog and Mixpanel (Pirsch and Mixpanel without a currency). Plausible's server fails with a schema error on any revenue metric; Matomo needs the ecommerce report, not the event; LogRocket asks which property holds it.
- **Rage and dead clicks** came through Privatrak (exact: "Duplicate form", 4 rage, 7 dead), PostHog (via SQL on `elements_chain`; dead right, rage a tie at 1), Mixpanel (by element id: `b`, the "Duplicate form" button, 11 dead clicks, 1 rage click) and LogRocket (dead clicks found, 9, not limited to the period; no rage clicks found). Clarity, Mouseflow and Amplitude, which also detect them, were not reachable.
- **Setting things up works in four of the ten servers** with data: Privatrak (typed `create_funnel`, inside a setup run that one call can undo), PostHog (typed `insight-create`, among ~640 sub-commands that also include deleting persons and changing project settings), Mixpanel (no saved-report tool: the funnel went onto a new board with `Create-Dashboard`) and Matomo (only through the raw `Goals.addGoal` API call; the dedicated goal tools only read). None but Privatrak can undo. GA4's three write tools exist only with `--allow-write` and the edit scope, which Google's guide does not set up. Cloudflare's `execute` could change any resource the token allows, with nothing between read and write.
- **Connecting is not the same as working.** Sentry's server did not finish connecting in the parallel run (its tools never appeared; a second run alone worked), PostHog timed out once and worked on retry, and Clarity's server asked for a browser sign-in in the middle of the run.

8.4 Per tool

Expected numbers are for the tool's delivered visits, 17-18 Nov UTC.

Privatrak (official, hosted, OAuth)

- **Can ask:** traffic, sources, pages with time on page and scroll depth, features (downloads, outbound links as named features), funnels, click problems, insights queries, flows. No country (by design: no geodata).
- **Ease:** 18 calls, none failed. A `project` id on every call (the connection covers several projects). Answers came from typed tools; page views needed an insights query, revenue a sum over the `total` detail.
- **Quality:**
  - Q1 72 visitors (person-days, per day summed) and 200 page views, against 72 and 200 expected (chapter 5).
  - Q2 LinkedIn 11 (11), then Google, DuckDuckGo, Product Hunt; direct 6.
  - Q4 61 s on `/article`: active time (visible tab, input), against 77 s wall-clock time per view; a different measure, said in the answer.
  - Q5 the saved funnel: 24 → 4 → 4 (23 → 4 → 4; the new-tab link to `/pricing` on `/lab` adds one).
  - Q6 4 downloads (4), Q7 6 outbound clicks (7: one Firefox visit lost its leave-time send, known from day 2), Q9 5 views of `/templates` (5), Q10 7 purchases and 56 EUR (7, 56).
  - Q8 exact: "Duplicate form", 4 rage clicks and 7 dead clicks (4 and 7 visits).
  - Downloads and outbound clicks are matched by link text, not URL: the server exposes no link target.
- **Setup:** created "MCP test: contact funnel" in setup run a setup run, after `preview_funnel`. Counts from 19 Nov (funnels count from creation).

PostHog (official, hosted, OAuth)

- **Can ask:** anything in HogQL (`execute-sql`), plus typed web overview, trends, funnels, paths, retention, insights, dashboards, recordings.
- **Ease:** one `exec` gateway in front of ~640 sub-commands; the server wants `learn` and `read-data-schema` first. 25 calls, most of them SQL. The first funnel SQL failed on a DateTime64 type. First connect timed out.
- **Quality:**
  - Q1 41 persons, 106 page views, 53 sessions (38 personas, ≤ 126 page views delivered); the typed `query-web-overview` gave the same numbers.
  - Q2 direct 17, LinkedIn 7, DuckDuckGo 6, Reddit 6: grouped by hand.

  - Q3 6 visitors from France, Q4 59.4 s (from `$prev_pageview_duration` on leave events), Q9 3 `not_found` events, Q10 3 purchases, 24 EUR (3).
  - Q5 the saved funnel is a rolling 7-day insight, so it was recomputed in SQL: 11 → 0 → 0. PostHog has no `/contact` or `/thanks` page view at all on those days, although up to two contact visits were delivered to it (chapter 7 has the dashboard's answer).
  - Q6 3 PDF clicks (autocapture, no download event), Q7 2 outbound (≤ 4), Q8 dead clicks "Duplicate form" 6; rage clicks a three-way tie at 1.
- **Setup:** created insight "MCP test: contact funnel"; defaults of 14-day window and last 7 days. The same server can delete persons, change project settings and launch experiments.

Mixpanel (official, hosted, OAuth, EU URL)

- **Can ask:** insights, funnels, flows and retention through one `Run-Query` tool that takes report JSON built from `Get-Query-Schema`; events, properties, saved reports, boards, cohorts, flags, experiments.
- **Ease:** 24 calls, none failed, but slow (6.6 minutes, the longest run): every report is hand-built JSON, the first connect timed out, and the rage/dead click queries came back empty until the assistant found that those events carry `$pathname`, not `current_url_path`.
- **Quality:** (39 personas, ≤ 138 page views delivered)
  - Q1 40 users, 124 page views. Q3 France 5 users. Q10 5 purchases, 40 EUR (5, 40 EUR: right).
  - Q2 no source or channel property: by referring domain, where the site itself is the biggest "source" (20 users) and direct shows as "undefined" (19).
  - Q4 not possible: no time on page in Mixpanel's autocapture.
  - Q5 the saved funnel did not match (no `/thanks` step, other period), so a new one: 13 → 1 → 1 (≤ 18 → 2 → 2).
  - Q6 3 PDF link clicks (3), Q7 1 w3.org click (≤ 3), Q9 3 views of `/templates` titled "Page not found" (≤ 4): autocapture clicks and page titles, no download, outbound or 404 events.
  - Q8 by element id only: `b` ("Duplicate form") 11 dead clicks and 1 rage click; no text or selector in the answer.
- **Setup:** no tool saves a report on its own, so the funnel went onto a new board "MCP test: contact funnel". The server can also edit and bulk-edit events and properties in the Lexicon.

Plausible (community server by Sentry, Stats API key)

- **Can ask:** timeseries, breakdowns by any dimension, goal conversions, period comparison. No funnels, no goal list, no writes.
- **Ease:** 15 calls, 3 failed (all revenue). Exact dates. Goal names found by breaking down by `event:goal`.
- **Quality:** Plausible keeps only the non-Chromium visits (39 delivered, 26 person-days).
  - Q1 31 visitors, 77 page views. Q3 France 2 (2 person-days). Q4 66 s (79 s). Q6 3 (3), Q7 4 (4), Q9 3 (3), Q10 3 purchases (3).
  - Q5 per-page visitors only (8 / 1 / 1), no order: Plausible's funnels are not in the Stats API.
  - Q10 revenue: every `total_revenue` request fails with "Output validation error" (a server bug, or Plausible returns no revenue for the goal).
  - Time on page comes without a unit.
  - The revenue error, verbatim: "Output validation error: Invalid structured content for tool compare_periods: period_a.metrics.total_revenue: Invalid input": the server's output schema rejects the revenue values Plausible returns.

Pirsch (community server, OAuth client)

- **Can ask:** one `pirsch_query_statistics` tool with ~30 metrics (pages, referrers, countries, events, event metadata, conversion goals, funnels…).
- **Ease:** 21 calls, 2 failed. The domain is on Asia/Bangkok; passing `timezone=UTC` gave UTC days.
- **Quality:**
  - Q1 64 visitors, 195 page views (68 person-days, 194). Q3 France 12 (11).

- Q2 LinkedIn 10, Google 9, direct 8; "Google" and "google" are separate rows.
- Q4 1,096 s on `/article`: wrong (77 s). The default page list shows 0 unless `includeAverageTimeOnPage` is set; `time_on_page` ignored the path.
- Q5 the `funnels` metric returned "not found" twice (it takes no funnel id); per-page 23 / 4 / 4 is right but unordered.
- Q6 3 downloads (4), Q7 6 (6), Q9 5 (5), Q10 7 purchases, revenue 56 with no currency (7, 56 EUR).

Matomo Cloud (official, hosted, auth token)

- **Can ask:** every processed report (`matomo_report_processed`), the raw API (`matomo_api_call_*`), goals, segments, dimensions.
- **Ease:** 18 calls; reports had to be found in the report list first. Unique visitors over a range are switched off in Matomo ("nb_uniq_visitors is not enabled for the requested period"), so only per-day visitors.
- **Quality:** Matomo itself counts fewer visits than it was sent (49 of 78 delivered; 7 of 15 on 18 Nov), so every number is lower. Checked in the UI in chapter 7.
  - Q1 49 visits, 103 page views (the 117 in the summary are "actions").
  - Q2 "Keyword not defined" (search) 13 first; direct is no row at all and had to be inferred as the remainder.
  - Q3 France 10 visits, Q4 235 s on `/article` (77 s; why it is three times longer was not resolved), Q5 the goal funnel 14 → 1 → 1 (its steps are not required in order), Q6 2, Q7 1, Q9 2, Q10 4 orders, 32 EUR.
- **Setup:** created goal "MCP test: thanks page" (URL contains `/thanks`) through the raw `Goals.addGoal` call.

Google Analytics 4 (official, local, own OAuth client)

- **Can ask:** `run_report` with any GA4 dimensions and metrics, funnel and conversion reports, realtime, key events, custom dimensions.
- **Ease:** 13 calls, 1 failed (funnels reject `pagePath`, need `pageLocation`). Raw GA4 field names and enums throughout.
- **The property runs on America/Los_Angeles**, and reports follow the property's timezone: "17-18 Nov" was 17 Nov 08:00 to 19 Nov 08:00 UTC, which drops day 1's main round (05:00-06:30 UTC) and adds day 3's. Against that window:
  - Q1 26 users, 94 page views (24 personas, 94 page views: exact).
  - Q5 11 → 1 → 1 (14 → 1 → 1), Q6 1 download (2), Q7 2 (3), Q9 3 (3), Q10 3 purchases, 24 EUR (5).
  - Q4 no time-on-page metric: 618 s engagement over 11 views, divided by the assistant (56 s per view).
- **Setup:** no write tool; the three documented ones need `--allow-write` and the edit scope.

LogRocket (official, hosted, OAuth; free plan allowed it)

- **Can ask:** natural-language metrics (`build_metric`), sessions, issues (errors, rage and dead clicks), network logs, AI session analysis.
- **Ease:** 15 calls, none failed, but the tool interprets the request: the period drifted into 19 Nov in five answers, and it answered two questions (outbound clicks, revenue) with a question back. Responses are large (session lists).
- **Quality:** Q1 47 users, 199 page views (44 personas, 192). Q2 LinkedIn 11 (11), direct 27. Q3 19 sessions (18). Q4 34 s. Q5 34 → 5 → 5 sessions over 17-19 Nov (27 → 5 → 5). Q6 nothing found. Q8 dead clicks "Duplicate form" 9 (counted since 14 Nov), rage clicks none. Q9 5 (5). Q10 7 sessions with a purchase (7), no revenue.
- **Setup:** no write tool.

Cloudflare Web Analytics (generic Cloudflare API server, OAuth)

- **Can ask:** anything the Cloudflare API has, through JavaScript that the assistant writes (`execute`): REST to find the account and site, GraphQL (`rumPageloadEventsAdaptiveGroups`) for the data.
- **Ease:** 5 calls, but long ones: finding the site tag, writing GraphQL, introspection returned null, field names guessed.
- **Quality:** Q1 95 visits (95 delivered: exact), 196 page views (190); no unique visitors exist. Q2 direct 36, Google 9, LinkedIn 9. Q3 France 19 visits (18). Q9 5 views of `/templates`. Nothing else exists in the product (no events, time

on page or funnels).
- **Setup:** not tried. The same `execute` could create or delete any resource the token allows (DNS, Workers, sites); no read-only mode.

Sentry (official, hosted, OAuth)

- First run: the server never finished connecting while ten sessions started at once; the second run alone worked.
- **Can ask:** errors, issues, traces, replays (as lists of at most 100), logs, profiles. Periods only relative (`7d`).
- **Quality:** no traffic numbers at all (tracing off, replays sampled and not countable). Q8: replays on `/lab` with dead clicks exist, rage clicks none in 7 days; no per-element counts.
- **Setup:** writes exist for issues, alerts, monitors, projects and teams, none for analytics.

Microsoft Clarity (official, local `npx`)

- Round 1 stopped at "Not signed in": the server's `login` tool opens a sign-in page in the default browser, which nobody completed in a headless run, and no Data Export token is configured.
- Signed in later the same day by starting the server alone, calling `login` and opening its link in a browser signed in to Clarity: approved at once, no consent screen, and the sign-in is remembered for later runs. The server also opened the same link in a second browser, where the sign-in then hit a closed local callback: harmless, but two windows for one sign-in.
- Asked in round 2: see there.

Not testable on our plans, or skipped

Umami (MCP from Pro), Amplitude (Enterprise or the Plus add-on), Mouseflow (Premium), Fathom (the community server has 3 tools: account, sites, current visitors; it cannot answer any of the questions). Simple Analytics is not in the lab.

8.5 Round 2 (19 Nov, afternoon)

Same folder and servers, model Opus, four sessions at a time (with a `WaitForMcpServers` step, which fixed round 1's connection failures). 26 sessions: a report and the ten questions on all 11 servers, the setup test on the four that can write. The transcripts are not published.

A report, as a site owner would ask for it

The brief named only the site, not the project: "write me a short analytics report on 17 and 18 Nov: traffic, sources, what people did, problems, what stands out, three recommendations", every number from a tool result, saved if the server can store reports. Every number the report states was listed and searched for in the session's tool results.

Tool	Found the project	Calls, time	Numbers stated, found in tool results	Broken `/templates` link	Dead "Duplicate form"	"Save draft" error	Saw test traffic	Saved
Privatrak	3 calls (the server lists its projects)	25, 2.9 min	70, all	– (no 404 data)	✓	✓	✓ (automated share, the burst)	review, undoable
PostHog	4	36, 3.5 min	72, 69 (3 rounded)	✓ incl. the link on `/product`	✓	✓	burst	notebook
Mixpanel	8	27, 4.4 min	61, all	✓ incl. the link	✓ (as `#b`)	–	✓	board with text and 4 charts
Matomo	3	28, 1.9 min	72, all	✓	–	✓	–	nowhere to save
GA4	2, then rebuilt UTC days from hourly data	18, 2.7 min	46, 41 (rates)	✓ incl. the link	–	–	✓	nowhere to save

Tool	Found the project	Calls, time	Numbers stated, found in tool results	Broken `/templates` link	Dead "Duplicate form"	"Save draft" error	Saw test traffic	Saved
Plausible	1 (no site list: used the domain given)	25, 2.4 min	73, 72	✓	–	–	–	nowhere
Pirsch	1	23, 1.3 min	45, 37 (rates)	✓	–	–	burst	nowhere
LogRocket	3	12, 2.9 min	66, all	✓	✓	✓	✓ (the Singapore IP: the VPN round)	nowhere
Cloudflare	3	8, 1.6 min	48, 41 (unit conversions)	–	–	–	✓	nowhere
Sentry	3	23, 4.8 min	37, all	✓ (replays)	✓ (`button#b`)	✓	✓ (read the `#r=` labels)	nowhere
Clarity	1	10, 2.0 min	52, 45	✓	–	✓	–	nowhere

- **No invented numbers.** Every number not found verbatim was a rate, a sum or a unit conversion of numbers that were. The difference between reports is what the server gives them, not honesty.
- **Most complete:** PostHog's report found all three site defects and its own measurement gaps (no `/contact`, `/thanks` or `/app` page views; a failing Amplitude snippet). LogRocket's and Sentry's also found all three defects and saw the test traffic, with every number found in their tool results. Privatrak's named the two broken controls with every number found, but could not see the 404 (Privatrak records no page status); the TypeError it reported after "Place order" is likely its own false positive (chapter 14). Mixpanel's noticed that every 18 Nov visitor had also come on 17 Nov (right: day 2 was returns).
- **Wrong conclusions came from what the tool records, not from the model:** Plausible read the smaller day 2 as "engagement collapsed" and recommends looking for a bad deploy; LogRocket calls the PDF link broken (a same-tab download looks like a dead click); Clarity calls "Open pricing in a new tab" broken for the same reason; Cloudflare and Clarity recommend speeding up pages measured at 12-14 s through the residential proxies.
- **Saving:** Privatrak (an AI review, in a setup run that can be undone), PostHog (a notebook) and Mixpanel (a board with a text card and charts). The other eight have nowhere to keep a report.

The ten questions again (Opus instead of Sonnet)

- **Same numbers** from Privatrak, Plausible, Pirsch (including the wrong 1,096 s, so that is the server's data), Matomo and Cloudflare. PostHog the same except time on page (59 s → 83 s, computed another way).
- **Different, and better:**
  - GA4: the assistant rebuilt exact UTC days from the property's hourly data (`dateHour`): 49 users and 179 page views (43 personas, 186 page views expected). Downloads 2, outbound 3, 404 5 (5), purchases 5 for 40 EUR.
  - LogRocket: kept the period, funnel 25 → 4 → 4 (22 → 4 → 4), found 3 PDF clicks and 5 outbound clicks by link text.
  - Sentry: counted replays by hand: France 13, `/templates` 3, dead clicks on `button#b`.
  - Mixpanel used the first-touch referrer, so its top source changed.
- So the servers that answered from fixed reports or queries (typed or raw) gave the same numbers with both models; the natural-language and list-based servers (LogRocket, Sentry) and the ones where the assistant chose a metric (Mixpanel, GA4) changed.
- **Clarity, first answers** (its window: 17-19 Nov; 90 delivered visits plus 4 manual ones, about 205 page views): 159 page views, no totals row; top "source" its own domain (58 sessions); France 29 sessions (at most 17 French visits were sent: off); `/article` 37 s active time; `/pricing` 25 → `/contact` 1 → `/thanks` 1 sessions (26 → 5 → 5), page level only; `/templates` 4 (5); `/lab` 5 dead clicks and no rage clicks, no element; no downloads found; 4 purchase sessions on 17-18 Nov (7), no revenue. 18 calls over both runs, 8 of them dashboard queries, inside the 10 a day.

Setting up, then cleaning up

The task: a goal for `/thanks`, a dashboard with visitors per day and the contact funnel, read both back, then remove everything (undo if there is one).

Tool	Goal	Dashboard, 2 charts	Read back	Clean-up
Privatrak	✓ (a funnel marked as goal; needs 2 steps, so step 1 "any page view")	partial: charts count events, not visitors (page views per day instead); no funnel chart (three numbers)	✓; a chart stores no period, so that could not be checked	undo: dry run listed 4 objects, the undo removed all 4; only the run's history entry stays
PostHog	✓ as an action (PostHog has no goals)	✓ unique users per day and a real funnel	✓ (one read tool returned null for the funnel, another worked)	deleted one by one, no undo or dry run; soft-deleted, still stored
Mixpanel	✗ no goal object; a cohort was refused ("plan does not allow saving cohorts")	✓ board with both reports	partial: saved query definitions cannot be read back	board deleted, its reports with it
Matomo	✓ plus a goal funnel	✗ the API creates an empty dashboard and cannot add widgets	✓	deleted one by one, no undo

How much of the assistant's context each server takes

Tool definitions loaded up front (Claude Code with tool search switched off; by default it loads tools only when needed, other clients may load all), measured as the context of the first turn minus a run without the server. Rough: about ±3,000 tokens of noise.

Server	Tools	Context
Mixpanel	~60	~64,000 tokens
Privatrak	53	~60,000
Sentry	74	~55,000
Clarity	30	~33,000
PostHog	1 gateway + a few	~15,000
GA4	10	~12,000
LogRocket	9	~11,000
Matomo	~15	~9,000
Plausible	5	~8,000
Cloudflare	4	~5,000
Pirsch	3	~2,000

Answers per call (average characters, round 2): Plausible ~400, Pirsch ~1,000, Clarity ~2,000, Privatrak, GA4 and Mixpanel 3,000-4,000, Matomo and PostHog 5,000-6,500 (single answers up to ~49,000), LogRocket 15,000-26,000 on average: ten times most others, because it returns session lists.

Seen along the way

- The run label is visible to replay tools: Sentry's replays show landing URLs like `#r=r4-d1-p06-contact`, recorded before the probe removes the hash. Counting tools never see it. A `#st-picker=…` session on 18 Nov is Privatrak's Element Picker, opened by us (chapter 4).
- A TypeError after "Place order" on `/checkout` (Privatrak) and a failing Mouseflow script there (Matomo, Sentry): see chapter 14.

What is still not covered

- One run per model and task.
- Answers against each tool's own dashboard: chapter 7.
- Only Claude Code; claude.ai, the desktop app, Cursor and Codex sign in differently.
- Report quality judged by us only.
- Umami, Amplitude and Mouseflow: not on our plans.

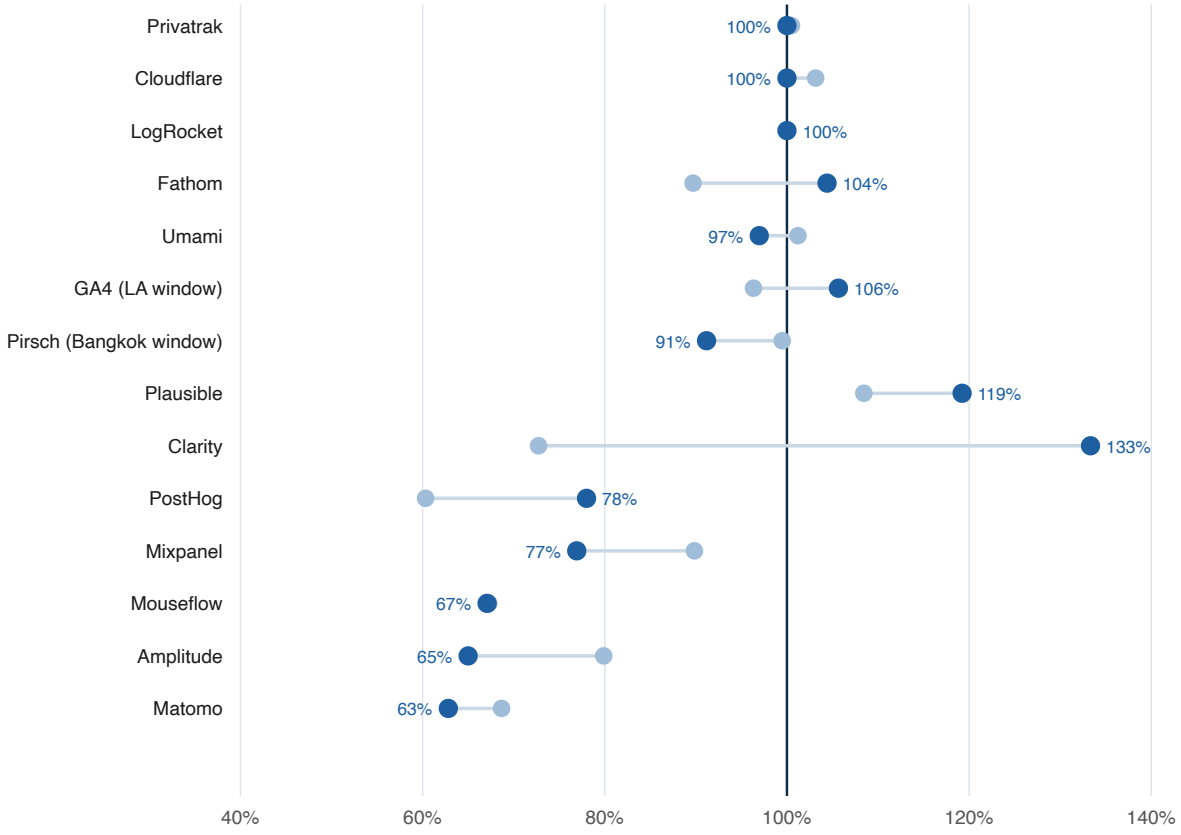
9. Findings by topic

This chapter puts each question side by side across all tools, using both the dashboard answers (chapter 7) and the MCP answers (chapter 8). Expected numbers are always the tool's own delivered visits (chapter 5.2), plus "up to" the three page loads that are not in the records (2 visitors, 7 page views; chapter 5) where they matter. Where an explanation is our reading rather than something the records prove, it is marked as a hypothesis.

9.1 Visitors: one word, five units

Reported as a share of what each tool was sent, 17-18 Nov

100% = the tool reported exactly what it received. Dark dot: visitors (in the tool's own unit); light dot: page views.



Source: dashboard answers (chapter 6) against delivered visits (chapter 4). Values outside 40-140% are drawn at the edge.
LogRocket shows no page-view total; Clarity's page views are the sum of its top pages; GA4 is compared on its own Los Angeles window.

Tool	Dashboard answer	Expected	Unit the tool counts	MCP answer
Privatrak	72 visitors	72: 71 person-days + the unknown visitor (checked, chapter 5)	visitor-day (daily-key hash of IP and UA)	72
Cloudflare	95 visits	95 visits + up to 2	visit (no visitor concept)	95
LogRocket	97 sessions	97 visits + up to 2	session	47 users (Sonnet), a 17-19 Nov period
Fathom	71 visitors	68 person-days + up to 2	visitor-day (daily-salt hash)	no usable server
Umami	64 visitors, 71 visits	66 person-days, 83 visits, + up to 2	visitor (monthly salt by default)	not on our plan
Pirsch	62 visitors (Bangkok days)	68 person-days (UTC) + up to 2	visitor-day	64 (UTC, via `timezone=UTC`)
Plausible	31 visitors	26 person-days + up to 2	visitor-day	31
GA4	28 active users (30 "total users" in Events)	~26-27 in its Los Angeles window	user (cookie)	26 (round 1); 49 for rebuilt UTC days (round 2; 43 personas expected)
Clarity	112 sessions, 108 unique users	84 visits	session; "46 bot sessions excluded"	112

Tool	Dashboard answer	Expected	Unit the tool counts	MCP answer
PostHog	39 visitors (headline); 41 in the tables below	50 person-days, 38 personas	person (cookie)	41
Mixpanel	40 users	52 person-days, 39 personas	user (cookie)	40
Mouseflow	40 visitors, 55 sessions	82 visits, 58 person-days	recorded sessions only	not on our plan
Amplitude	39 visitors, 54 sessions	≤ 60 person-days (consent)	user (device ID)	not on our plan
Matomo	49 visits (unique visitors not offered for a range)	78 visits	visit	49
Sentry	–	77 visits	sampled replays	–

What the numbers show:

- **Daily-hash tools land close to person-days.** These are Privatrak, Fathom, Umami, Pirsch and Plausible. Of their small overshoots (Fathom +3, Plausible +5), up to 2 are the visitors not in the records (chapter 5). The rest is most likely visits that changed IP or user agent partway through:
  - `r4-d2-p19-late` changed IP within the visit.
  - `r4-d1-p35-outbound` sent its leave with another user agent.
  - Proxy exits changed between a visit's pages.

  This is a hypothesis: it was not traced visitor by visitor.
- **Cookie tools count persons, so they come out below person-days.** PostHog, Mixpanel and Amplitude count a persona that returns the next day once, and they lost the consent decliners as well. PostHog's 41 persons and Mixpanel's 40 users sit right at the delivered personas (38-39), which is what they should count.
- **Session and visit counters land on visits.** Cloudflare and LogRocket are exact. Clarity is the exception: it reports more sessions (112) than visits it was sent (84). Its sessioning splits visits, and its bot filter still excluded 46.
- **Two numbers on one screen.**
  - PostHog's web analytics headline says 39 visitors and 76 page views, while the tables below it and a trends insight say 41 and 106. A person reads the headline first.
  - GA4 shows 28 "active users" in Pages and screens, and 30 "total users" in Events.
- **Matomo counted 49 of the 78 visits it was sent**, and 7 of 15 on 18 Nov. It is explained by its 30-minute visit merge and by visits from most of the NordVPN exits never appearing; the setting behind those drops is not identified (chapter 10). It also dropped the pilot's NordVPN Singapore visits.
- **Mouseflow counts only what it records.** That is 55 of 82 visits on the free plan.

9.2 Page views

Tool	Dashboard	Expected	Notes
Privatrak	200 (sum of the Pages list; Insights counts the same)	200: 199 – 1 lost at a visit's end + 2 not in the records (checked event by event, chapter 5)	the total is an Insights query, not on the Overview; MCP asked Insights and got 200; 175 excluding automated visits
Cloudflare	196	190 + up to 7	
Umami	166	164 + up to 7	
Pirsch	193 (Bangkok days)	194 + up to 7	MCP (UTC) 195
Plausible	77	71 + up to 7	
GA4	105	~109 (window) + up to 6	MCP round 1: 94 (same window, before the manual round was processed)
Fathom	174	194 + up to 7	20 short, unexplained
Amplitude	131	≤ 164 + up to 7	
Mixpanel	124	≤ 138 + up to 7	
PostHog	76 headline / 106 tables	≤ 126 + up to 7	

Tool	Dashboard	Expected	Notes
Mouseflow	111	165 + up to 7	recorded sessions only
Matomo	103 ("actions" 117)	150 + up to 7	
Clarity	no total; top pages add up to ~128	176 + up to 7	pages per session 1.14
LogRocket	no total	192 + up to 7	MCP: 199 page views
Sentry	–	146 + up to 7	

No tool shows more page views than this allows. "Up to 7" is the most a tool can have received of the unrecorded page loads; only Privatrak's stored events could be checked one by one.

Query strings. Matomo keeps them by default, so `/article?ref=producthunt` is a row of its own. Most other tools strip or ignore them.

9.3 Sources and direct traffic

Delivered for all tools: direct 26 visits, LinkedIn 11, then DuckDuckGo, Hacker News, Google and Reddit 8 each.

Tool	Top sources as shown (dashboard)	Where "direct" stands
Privatrak	LinkedIn 11, Google 8, DuckDuckGo 7, Product Hunt 7	"Direct or unknown" 6
Plausible	Direct 5, Google 5, LinkedIn 4, DuckDuckGo 3, Perplexity 3	5 (default tab: Channels)
Pirsch	LinkedIn 10, Google 9, DuckDuckGo 7, Hacker News 7, Reddit 7, producthunt 7	Direct / None 6
Umami	linkedin.com 10, chatgpt.com 7, reddit.com 7, news.ycombinator.com 7, google.com 6, duckduckgo.com 6 (exact)	only in Channels: Direct 20
Fathom	LinkedIn 11, Google 8, DuckDuckGo 7, news.ycombinator.com 5	Direct / Unknown 19
Cloudflare	google 9, linkedin 9, reddit 8, duckduckgo 8	None (direct) 36
Matomo	Social 17, Search 13, Direct 7, AI Assistants 6, Campaigns 6; "Keyword not defined" 13	a row in the UI; inferred as a remainder through MCP
GA4	google 7, linkedin.com 7, reddit.com 4, bing 3 (default: channel groups)	(direct) 6
PostHog	linkedin.com 7, duckduckgo.com 6, google.com 5, perplexity.ai 4	$direct 14 (MCP grouped by hand: 17)
Mixpanel	clicklab.privatrak.com 20, google.com 8, reddit.com 7, linkedin.com 6	"(not set)" 19
Clarity	clicklab.privatrak.com 43, www.reddit.com 11, www.linkedin.com 10, chatgpt.com 9	not a row
Amplitude	channels: Organic Search 13, Organic Social 13, Direct 9; by domain (a chart to build): LinkedIn 7, Google 7, Reddit 6	(none) 8
LogRocket	one source at a time: "Referrer URL contains linkedin" 11 (exact)	no list to rank
Mouseflow	no source report found	–

What stands out:

- **"Direct" means different things.**
  - **Privatrak** gives a visitor the source of their first page view of the day. Most lab visits came with a referrer, and the "direct" personas returned on other days with one, so it reports 6.
  - **Visit-based tools** report 20-36.
  - **Plausible** reports 5, of its own 12 delivered direct visits.
- **The site itself as the top "source".** Mixpanel (by referring domain) and Clarity (by referrer) list `clicklab.privatrak.com` first, because internal navigation counts as a referrer there. Direct traffic is "(not set)" or missing.
- **Case.** Pirsch's MCP answer has "Google" and "google" as separate rows. The newsletter's `utm_source=Newsletter` was sent with a capital on purpose.
- `ref=producthunt` (no referrer, a `ref` parameter) is recognised as a source by Privatrak ("Product Hunt" 7), Pirsch ("producthunt" 7) and Matomo (Campaigns 6). In tools that only read the referrer it falls under direct.
- **AI assistants as a channel.** Matomo has an "AI Assistants" channel (6), and Umami has "LLM" (8). ChatGPT visits carried `utm_source=chatgpt.com` and a referrer. Perplexity visits carried only a referrer.

- **Default views hide the source.** GA4, Plausible and Amplitude open on channel groups. The source is one switch away in GA4 and Plausible, and in Amplitude it is a chart to build.

9.4 Time on page: 0 seconds to 18 minutes for the same page

The true mean wall-clock time per view of `/article` was **77 s** (25 views over all tools). Each tool's delivered views have means between 72.8 and 79.1 s.

Tool	Dashboard	What the number is	Verdict
Plausible	1 min 06 s (79 s wall-clock expected)	time on page, in the expanded Top pages	✓
PostHog	59.4 s	average of `$prev_pageview_duration` on `$pageleave`, only through a trends insight	✓ (MCP Opus computed 83 s another way)
Privatrak	1 min 1 s	**active** time: tab visible, input within ~30 s; only the docs say so	≈ (a different measure)
GA4	1 min 07 s	"Average online active user engagement time": per active user, not per view (11 users, 16 views)	≈
Mouseflow	visit time 47.3 s, engagement 43.1 s	from recorded sessions	≈
Clarity	"Active time spent 19 sec"	all sessions, not per page; MCP 37 s for 17-19 Nov	≈
Matomo	3 min 55 s (235 s)	time on page	✗
Pirsch	18 min 16 s (MCP 1,096 s)	time on page; MCP's default page list shows 0 unless `includeAverageTimeOnPage` is set	✗
Amplitude	18 min 45 s	"Time Spent Per Page"	✗
Umami	0 s	"Visit duration" for visits with `/article`; measured between page views, and 15 of 16 such visits saw only `/article` (bounce 94%)	✗
Mixpanel, LogRocket, Fathom, Cloudflare, Sentry	–	no per-page time (LogRocket: only as a filter condition; Fathom: only "avg time on site 00:59")	–

Three tools show the same pattern of inflation on other pages too:

Page	Pirsch	Amplitude	Matomo
`/thanks`	16 min 20 s	–	17 min 33 s
`/search`	15 min 0 s	15 min 3 s	–
`/templates`	–	8 min 37 s	8 min 38 s

Hypothesis, not verified. These tools likely measure the time from a page view to the visitor's *next* event. For some visits, the next event came much later:

- the return-within-the-hour visits, about 30 minutes after the first
- the next pages of a long-running persona

The end of a visit is not seen as the end of the page. Section 14.2 (item 3) tested this against each persona's next page view.

In short: time on page is the metric where the choice of tool changes the answer most, by a factor of more than 14 among tools that claim to measure the same thing.

9.5 Geography: visitors from France

Tool	Dashboard	Expected (visits / person-days)	Verdict
Pirsch	11	18 / 11	✓
Plausible	2	3 / 2	✓
Umami	12 visitors	15 / 11	✓

Tool	Dashboard	Expected (visits / person-days)	Verdict
Cloudflare	19 visits	18 / 11	✓
LogRocket	18 sessions	18 visits	✓ exact
Matomo	10 visits	13 / 9	✓
PostHog	6	10 / 7	✓
Mixpanel	5	9 / 7	✓
Amplitude	8 (5 + 3 unique users per day)	≤ 16 / 10	≈
Fathom	15	19 / 12; lists **Brazil 20** first, though no persona was in Brazil	≈
Mouseflow	5 (read off a bar chart without numbers)	15 / 9	≈
GA4	4 active users (Los Angeles window)	window differs	≈
Clarity	25 sessions	14 visits	✗ (MCP: 29 for 17-19 Nov)
Sentry	– (MCP Opus counted replays by hand: 13)	13 visits	–
Privatrak	–		– by design: no geodata stored

Brazil in Fathom. In the pilot, Fathom placed NordVPN Singapore exits in Brazil. Later reads showed it places NordVPN's PacketHub exits and some residential exits there too (chapters 10 and 14), so Brazil 20 is VPN, data-centre and residential visits placed by Fathom's IP database.

9.6 The contact funnel

Expected funnel per tool: 23 → 4 → 4 for Privatrak and 22 → 4 → 4 for most others. Consent-gated tools expect less.

Tool	Dashboard	Expected	MCP	Notes
Privatrak	24 → 4 → 4	23 → 4 → 4	24 → 4 → 4	the new-tab link on `/lab` adds one entry; the funnel **list** shows each funnel's own 31-day window without a label
Umami	22 → 3 → 3	20 → 3 → 3	–	Checkout funnel beside it: 22 → 7 → 7 → 7
Pirsch	23 → 4 → 4	22 → 4 → 4	"not found" twice; per page 23 / 4 / 4	works in the UI, fails in the server
Plausible	8 → 1 → 1 ("3-step funnel, sequential")	5 → 1 → 1	per page only (8 / 1 / 1)	funnels are not in the Stats API
LogRocket	per page: 25 / 4 / 4	22 → 4 → 4	Sonnet 34 → 5 → 5 (17-19 Nov); Opus 25 → 4 → 4	an ordered funnel needs a chart
Mixpanel	13 → 2 → 2 (saved board)	≤ 18 → 2 → 2	13 → 1 → 1 (new funnel)	changing a board's date enters edit mode
Matomo	14 → 1 → 1	19 → 3 → 3	14 → 1 → 1	goal funnel steps not required in order
GA4	13 → 1 → 1 (window)	14 → 1 → 1 (window)	11 → 1 → 1	built as an exploration: about 30 clicks; steps can't be typed as paths
PostHog	11 → 0 → 0	≤ 13 → 2 → 2	11 → 0 → 0	PostHog has **no** `/contact` or `/thanks` page view on those days
Amplitude	15 → 1 → 0	≤ 20 → 4 → 4	–	
Clarity	15 → 0 → 0	22 → 4 → 4	25 → 1 → 1 (17-19 Nov)	
Mouseflow	0 (0%)	16 → 3 → 3	–	no `/contact` or `/thanks` among recorded pages
Fathom, Cloudflare, Sentry	–		–	no funnels

An open question. PostHog, Clarity, Mouseflow and Amplitude are missing most of the `/contact` → `/thanks` steps, although contact visits were delivered to them. Possible causes:

- The contact personas declined consent, so a tool received only configuration requests (the expected numbers are upper bounds).

- The form's submit navigation loses the next page view in these tools.

Section 14.2 (item 2) checked this: of the four visits that reached `/thanks`, three declined consent and one was a marked visit.

9.7 Rage clicks and dead clicks

The "Duplicate form" button does nothing. It got dead clicks in 7 visits and rage clicks in 4.

Tool	What it shows	Element named by	Verdict
Privatrak	"Duplicate form": 7 no effect, 4 repeated clicks, on the Overview	its text, with the page	✓ exact (UI and MCP)
Mixpanel	Dead Click by element ID: `b` 11, `a` 4, (not set) 17; Rage Click: `b` 1	`id` only; no text or selector property	✓ (dead), rage low
PostHog	UI: "Frustrating pages" `/lab` 3 rage, 11 dead (page level only; elements need the toolbar on the site); MCP via SQL on `elements_chain`: dead "Duplicate form" 6, rage a three-way tie at 1	page; through SQL, text	≈
Sentry	"Most Dead Clicks: button#b 3, a 1"; "Most Rage Clicks: no results"	CSS selector	≈ (sampled replays)
LogRocket	Dead Clicked "Duplicate form": 7 sessions (MCP 9, since 14 Nov); Rage Clicked: "No sessions found"; the Home widget "Most Rage Clicked Elements" says "No data found"	text	≈ (dead exact, rage missed)
Amplitude	Dead Click by Element Text: Duplicate form 5, Delete form 2, Save draft 2, Publish form 1; no rage event	text	≈
Clarity	Heatmap `/lab` "Dead clicks": the paragraph text 3, the chart 1, "Open pricing in a new tab" 1; "Rage clicks" none; "Duplicate form" (11 clicks) **not flagged**	position in the heatmap	≈
Mouseflow	"Average click Rage events 0"; dead clicks on 2 page views; `/lab` friction score 0.5	–	≈
Plausible, Pirsch, Matomo, GA4, Fathom, Umami, Cloudflare	–		– (Matomo has heatmaps but no rage or dead clicks per element; Umami's heatmaps need Business)

What this shows:

- **Dead clicks are defined differently.**
  - Amplitude counts clicks on the disabled "Delete form", the error-throwing "Save draft" and the slow "Publish form" as dead. Each is defensible.
  - Clarity counts clicks on non-controls (text, chart) and on the new-tab link, but not on a real button that does nothing.
- **Rage-click thresholds are high.** Four visits clicked "Duplicate form" three or four times in quick succession (200-300 ms apart; patterns fixed before any tool was read, section 3.12). Only Privatrak counted all four. Mixpanel and PostHog counted one, and the replay tools counted none.
- **Wrong conclusions.** In the MCP reports, LogRocket called the PDF link broken: a same-tab download looks like a dead click. Clarity called "Open pricing in a new tab" broken, because a new tab looks dead to the page it was clicked on.

9.8 Downloads and outbound clicks

Expected: PDF 3-4 and outbound 4-7, per tool.

Tool	PDF	Outbound to w3.org	How
Privatrak	4 (4)	6 (7)	features named by feature rules (Privatrak's rules that give clicks a name) set up before the series, matched by link text; without setup the clicks are in Events, unnamed

Tool	PDF	Outbound to w3.org	How
Plausible	3 (3)	4 (4)	on by default, goals created automatically
Pirsch	3 (4)	6 (6)	arrive on their own (File Download, Outbound Link Click)
Matomo	2 (3)	1 (4)	automatic; in Visits Overview and as goals
GA4	1 (window: 2)	2 (window: 3)	enhanced measurement; `link_url` is one drill-down further
PostHog	3	2 (≤ 4)	autocapture; PDF only through a trends insight; outbound table in the page report
Mixpanel	3 (3)	1 (≤ 3)	`[Auto] Element Click` by "Link target" (the `href`), a name you have to know
Amplitude	3 (3)	2 (≤ 3)	Element Clicked by element text
LogRocket	3 (3)	5 (5)	filter "Clicked" by link text; the Sonnet MCP run found no PDF clicks
Clarity	–	3 sessions (4)	smart event "Outbound click"; no download event
Fathom, Umami	–	–	only events the site sends
Cloudflare, Sentry	–	–	
Mouseflow	not answered	not answered	only the click heatmap would show them, and its viewer loads the lab page

9.9 404 pages

`/templates` does not exist and returns a 404 page. It got 5 views (4 for some tools).

Tool	Answer	How a person finds it
Plausible	404 goal 3 (3)	automatic 404 goal: findability 5
Pirsch	"404 Page Not Found" 5 (5)	event, automatic: 5
Fathom	"404: /templates" 5 (5)	the lab sends Fathom a 404 event: 5
PostHog	3 `not_found` events, 3 views	3
Mixpanel	3 views of `/templates` titled "Page not found"	3
Privatrak	5 views	Pages: nothing marks it as a 404; you have to know the path (4)
Umami	4 (exact)	filter by path: 4
Matomo	2 (4)	4
GA4	3 (3)	page title "Page not found" helps: 4
Cloudflare	5 (5)	paths list switched from 5 to 15 items: 3
Clarity	4 (5)	Top pages: 4
Amplitude	3 page views (5)	4
Mouseflow	3 views (5); friction list counts "404" on 6 page views	4
LogRocket	5 (5)	filter Visited URL: 3

Privatrak and the MCP reports. Privatrak's MCP report could not see the broken link at all, because Privatrak stores no page status. Most other servers found it (chapter 8.5).

9.10 Revenue

The lab sent 8 EUR per Team purchase: 7 purchases, 56 EUR in total. Each tool expects its own delivered purchases.

Tool	Dashboard	Expected	MCP	Catch
Plausible	Purchase 3, revenue €24.0, avg €8.0	3, €24	count 3; revenue **error** on every call	none in the UI; the community server's schema rejects revenue
Fathom	Purchase 7, €56	7, €56	–	none
Umami	7 orders, €56.00, with revenue per referrer and country	7, €56	–	the Revenue page opens in USD and shows "$0.00, 0 orders"

Tool	Dashboard	Expected	MCP	Catch
Mixpanel	5 purchases, sum of `amount` 40	5, €40	5, 40 EUR	no currency shown; Aggregate Property → Sum
Amplitude	5, revenue 40	5, €40	–	the property first defaulted to `$currency`, giving 0
Privatrak	Purchase 7; revenue 56 only through Insights (Sum of detail `total`)	7, €56	7, 56 EUR	no currency; the Purchase goal has no value set, so Sources shows "–"
PostHog	3 purchases, revenue 24 (trends insight, sum of `revenue`)	3, €24	3, 24 EUR	summing `total` gave 0: you must know the property's name
Pirsch	Purchase 7; revenue only as metadata ("8" on 7 events)	7, €56	7, 56 (no currency)	you multiply yourself
Matomo	4 orders, €32	5, €40	4, 32 EUR	ecommerce report, not the event
GA4	purchase 3, **$26.44** (window)	5 (window)	3, "24 EUR"	converted to the property's USD without a word
LogRocket	7 sessions reached `/order-complete`; no sum	7	7 sessions, no revenue (asked back which property)	no revenue sum in the session list
Clarity	Purchase 4 sessions, no revenue	7	4 sessions	–
Mouseflow	Purchase tag on 2 recorded sessions, "order placed" on 1, no amount	5	–	recorded sessions only
Cloudflare, Sentry	–		–	

Currency is the recurring trap.

- GA4 converts silently.
- Umami defaults its display to USD and shows zero.
- PostHog's base currency was left at USD.
- Three tools show no currency at all: Privatrak, Mixpanel and Pirsch.

9.11 Timezones: what "17 Nov" means

Tool	Dashboard	MCP
Privatrak	UTC (the project's zone)	exact project days
Plausible	UTC (site zone); custom range in the URL	exact dates
Matomo	UTC; `period=range&date=…`	exact
PostHog	UTC; `date_from` / `date_to`	exact
Sentry	exact UTC range (`utc=true`)	relative only (`7d`)
Fathom	UTC (`from=… 00:00:00&to=… 23:59:59`)	–
Amplitude	UTC ("UTC+00:00" in the picker)	–
Mouseflow	UTC days	–
Umami	the picker gives UTC days; **the URL holds the browser's midnights** (`range:1794848400000:…` = 16 Nov 17:00 UTC), so an edited URL shifts the window by the browser's offset (38 visitors, 99 views, the 19 Nov run included)	–
Cloudflare	the browser's zone, but the absolute range takes times; 07:00-07:00 GMT+7 is exactly the UTC days	exact (GraphQL)
Clarity	the browser's zone; exact UTC only through millisecond timestamps in the URL	last 1-3 days only
LogRocket	dashboards in the browser's zone; the Session Replay list has a GMT+7/UTC switch	drifted into 19 Nov in five answers (Sonnet)
Pirsch	**the domain's zone only** (it was on Asia/Bangkok); no UTC days possible	UTC via `timezone=UTC`
GA4	**the property's zone only** (it was on America/Los_Angeles)	the property's zone; Opus rebuilt UTC days from `dateHour`

Consequences:

- **GA4's "17-18 Nov"** is 17 Nov 08:00 to 19 Nov 08:00 UTC. It leaves out day 1's main round and includes day 3 and the manual round.
- **Pirsch's** window is 16 Nov 17:00 to 18 Nov 17:00 UTC. It misses the before-midnight visits.
- **Both lab tools ended up off UTC** despite the setup rule. In both, the timezone setting was misleading:
  - Pirsch's select kept showing the browser zone.
  - GA4's change, recorded at setup, was not what the property used.

GA4's numbers move after the fact. The users, page views and funnel entries asked on 20 Nov were higher than the same window asked through MCP on 19 Nov at 09:25 UTC: 28 against 26 users, 105 against 94 views, and 13 against 11 funnel entries. The manual round happened two hours before the MCP run and was processed later. A GA4 answer about a finished day still depends on when it is asked.

9.12 Bots, automation and data-centre traffic

Tool	What it did with automated or data-centre visits
Plausible	dropped **every** Playwright-Chromium visit (202 with `x-plausible-dropped`), on residential, VPN and data-centre exits alike; kept Firefox and most WebKit; kept a real Chrome; dropped one residential IP entirely in the check visit (reputation)
Clarity	"46 bot sessions excluded" for 17-18 Nov (49 on 15 Nov, partly r2's user-agent split)
Privatrak	stores and counts automated visits but marks them: 25 of 200 page views (12.5%) were automated; reports offer "by people"
Matomo	dropped 11 of 13 NordVPN visits (PacketHub, Datacamp networks) and, on 20 Nov, every visit from a laptop on the same VPN; kept the Singapore data-centre group and every marked and agent-like visit (chapter 10). With the 30-minute visit merge this explains its 49 of 78
Mouseflow	records nothing from `navigator.webdriver` browsers (0 of 17 marked visits)
LogRocket	"block well-known bots" listed under Recording Settings
Fathom	bot blocking on by default
PostHog	its script mostly stops on `navigator.webdriver` (4 of 17 marked visits sent)
Others	no filtering of marked or agent-like visits; no tool flagged the agent-like visits or the Claude in Chrome agent (chapters 10 and 11)

Per visit (chapter 10, "What the browsers themselves held back"): Plausible and Mouseflow sent nothing for the 17 marked visits, PostHog 4 of 17; every tool sent the 16 agent-like visits. The AI fetchers, link previews and the browser agent are in chapter 11.

9.13 Consent and blockers

Effect	Size on 17-18 Nov	Tools affected
Consent declined	30 visits	Matomo (17 lost), Sentry (18), Mixpanel (19), PostHog (16), Clarity (4), Amplitude (13 cancelled)
uBlock Origin Lite	2 personas	blocks most tools' scripts; not Privatrak
Firefox strict tracking protection	2 personas	blocks GA4 and several others
Do Not Track + GPC	3 personas, 14 visits	Mixpanel and Clarity sent nothing; every other tool sent them. DNT alone (20 Nov agent visit): Mixpanel dropped it, Clarity recorded it (chapter 10)

A test in October, with the same snippets checked against uBlock Origin defaults, EasyList + EasyPrivacy and AdGuard, found that every tool except Privatrak was blocked by all three lists. Privatrak was blocked by none, most likely because it is new and not yet listed.

9.14 Personal data on screen

- **Full IP addresses as labels.** LogRocket labels visitors by city, and one session by its full IP address, in the sessions list. Sentry labels each replay by the visitor's full IP. In the lab these are proxy and VPN exits; on a real site they would be visitors' IPs. None are reproduced in this report.
- **Run labels in replays.** Sentry's replays show landing URLs like `#r=r4-d1-p06-contact`, recorded before the probe removes the hash. Counting tools never see it.

- **Pre-ticked options.** GA4's setup pre-ticks three data-sharing options and four email preferences. Creating a key event pre-selects a 1 USD default value.
- **Mouseflow's default.** It records nothing until the account confirms that personal data is excluded.
- **Privatrak** stores no geodata, which is why it cannot answer the France question.

9.15 Data freshness and misleading empty states

- **GA4** kept processing late data for a finished day (9.11).
- **Fathom's** "Last 7 days" view lagged behind "Today" (11 against 46 visitors on 15 Nov).
- **Clarity** processes with a delay of hours.
- **Mixpanel's** home page said "No users seen in the last week" and "No events found" while lab events arrived all week. Its project page's usage statistics said 0 events while the Events view listed 196.
- **Pirsch's** goals settings listed "0 Visitors, 0% CR" for goals that had conversions.
- **Umami's** start page and settings page show the login form even when you are signed in. The dashboard URL opens directly. An earlier round took the login form at face value.
- **Umami's** revenue page shows $0.00 until the currency is switched.

9.16 Dashboards against MCP

- **Identical numbers** where the server calls the same API as the dashboard: Privatrak, Matomo, Cloudflare and Mixpanel. For PostHog, the MCP matches the tables, not the headline.
- **The dashboard can do more than the server:**
  - Plausible's UI shows revenue (€24) and the ordered funnel (8 → 1 → 1), where the server fails or cannot.
  - Pirsch's UI funnel works (23 → 4 → 4), where the server's `funnels` metric fails.
  - Clarity's UI can show exact UTC days through the URL, while its server is limited to the last 1-3 days.
  - Sentry's UI names the dead-click element as a ready widget.
- **The server can do more than the dashboard:**
  - Pirsch's server takes `timezone=UTC`, so it gives UTC days the UI cannot.
  - GA4's server let Opus rebuild exact UTC days from hourly data.
- **LogRocket's UI was exact where the Sonnet MCP run drifted:** 97 sessions, France 18, funnel pages 25 / 4 / 4, PDF 3, outbound 5, 404 5, purchases 7.
- **Speed.** For Mixpanel and Amplitude the dashboard is no faster than the server: every answer is a report to build either way.

10. All days in every tool

Chapters 7 and 8 asked ten questions about 17 and 18 Nov. This chapter reads each tool for the whole series: 17-20 Nov as one window and day by day, the manual round (19 Nov), the visits that are not in the manifest, and where the tool reaches back, the earlier series' days (15 Nov r2, 16 Nov r3). It also covers what the browsers themselves held back, what the 15 tools cost a visitor, and the comparison areas beyond counting. Expected numbers are each tool's delivered visits (chapter 5) plus the unlabelled extras below. The MCP-read tools are summarised in one section; their full answers are Appendix G.

Extras on top of the manifest (each tool may or may not have received them; there is no per-request record):

- 17-18 Nov: p14's new tab (+1 page view, same visitor), the Click Map visit on 18 Nov 11:11 UTC (+1 visitor, 4 page views, Thailand, referrer app.privatrak.com), an unknown visitor on 18 Nov 17:56 UTC (+1 visitor, 2 page views). Privatrak holds the new tab, nothing of the Click Map visit and 1 page view of the unknown one (checked event by event, chapter 5).
- 19 Nov: the manual round, 4 visits (+5 visitors for IP+UA tools: the phone's IP changed), 17 page loads. Privatrak holds 12 page views of it.
- 20 Nov: the stray visit from Cloudflare's site list (+1 visitor, 1 page view, 1.5 s). Privatrak holds nothing of it. The Click Map visit, the stray visit and the manual round's Chrome visit were made in our own browser, which blocks Privatrak's ingest so that we do not track ourselves; hence Privatrak's missing visits.
- 20 Nov from 11:44 UTC: the AI and app rounds, two page-weight runs and a diagnostic page view (chapter 11). Most per-tool tables here were read before them; Amplitude (~12:00), Mouseflow (~12:10) and Clarity (~12:20) were read during the rounds, so their 20 Nov rows may hold the first of these visits.

10.1 Fathom (read 20 Nov, ~11:40 UTC)

Dashboard, custom range in UTC (`from=… 00:00:00&to=… 23:59:59`).

Window	Site visitors	Pageviews	Expected visitors (person-days, pd, + extras)	Expected pageviews (+ extras)	Events
15 Nov (r2)	46	123	46 pd	139	12 completions
16 Nov (r3)	49	174	46 pd	195	28 completions
17-18 Nov	71	174	68 + 2 = 70	194 + 7 = 201	Purchase 7 (€56), 404 5
19 Nov	13	35	9 + 4-5 = 13-14	28 + 17 = 45	Plan selected 4, Purchase 2 (€16)
20 Nov	11	29	10 + 1 = 11	28 + 1 = 29	none (no purchase that day: right)
17-20 Nov	95	238	87 + 8 = 95	250 + 25 = 275	Plan selected 11, Purchase 9 (€72), 404 5

- **Visitors are exact once the extras are counted**, on every day and over the window: 17-20 Nov's 95 = 87 person-days + the 8 extra visitor-days.
- **A range's visitors are the sum of the days' visitors.** 17-20 Nov is 71 + 13 + 11 = 95, so a persona that came on four days is four visitors. Fathom recognises nobody across days (daily salt), as documented.
- **Page views fall short where they come in bursts.** On 20 Nov they are exact (29); on 17-18 Nov 27 are missing, on 19 Nov 10 (the manual round's reloads and the phone's quick repeats are the likely part). Open: which page views Fathom leaves out.
- **Revenue exact:** €56 on 17-18 Nov, €16 on 19 Nov, €72 over the window.
- **France:** 3 on 19 Nov (3 expected), 4 on 20 Nov (4), 22 over 17-20 Nov (26 visits, 19 person-days).
- **Brazil 22 over 17-20 Nov, and 2 on 19 Nov**, when no data-centre or VPN visit ran (only residential US/GB/DE/FR personas and the manual round). So Fathom puts some residential proxy IPs in Brazil too, not only the NordVPN Singapore exits.
- **Thailand:** 2 on 19 Nov (the manual round is 4 visits from two IPs), 1 on 20 Nov (the stray visit).

- **Devices 17-20 Nov:** desktop 79, phone 16. Browsers: Chrome 45, Safari 27, Firefox 22, Edge 1.
- **Sources 17-20 Nov:** Direct / Unknown 27, Google 14, LinkedIn 13, news.ycombinator.com 8, DuckDuckGo 7, Perplexity 6, Bing 5, Reddit 5, X 5, chatgpt.com 4. Campaigns (UTM): "No data to display", although the newsletter and ads visits carried utm_campaign.
- **Returning visitors:** Fathom has no new-vs-returning report.

10.2 Plausible (read 20 Nov, ~11:00 UTC)

Dashboard, `period=custom&from=…&to=…` and `period=day&date=…`, site on UTC. Expected = Plausible's delivered visits (non-Chromium only, chapter 5) plus the extras, which are real browsers Plausible keeps.

Window	Unique visitors	Visits	Pageviews	Expected visitors (pd + extras)	Expected pageviews
15 Nov (r2)	18	18	41	16 pd (25 visits)	39
16 Nov (r3)	20	22	92	17 pd (42 visits)	88
17-18 Nov	31	31	77	26 + 2 = 28	71 + 7 = 78
19 Nov	10	10	28	3 + 4-5 = 7-8	11 + 17 = 28
20 Nov	5	5	12	4 + 1 = 5	11 + 1 = 12
17-20 Nov	46	46	117	33 + 8 = 41	93 + 25 = 118

- **Page views are exact or within one** on every r4 day once the extras count (77/78, 28/28, 12/12, 117/118). So Plausible did keep the Click Map visit, the manual round and the stray visit: real Chrome and Safari.
- **Visitors run a few over on the days with IP changes** (17-18 Nov +3, 19 Nov +2-3: the phone switched IP mid-visit; on 18 Nov p19 did).
- **A range's visitors are the sum of its days** (31 + 10 + 5 = 46): no recognition across days, as documented (daily salt).
- **r2 and r3 days read close to delivery** (41/39 and 92/88 page views), r2's user-agent split adding visitors (18 for 16 person-days).
- Sources 19 Nov: Direct 6 (the manual round had no referrers), Google 3, X 1.

10.3 Umami Cloud (read 20 Nov, ~11:05 UTC)

Dashboard, read with the date picker, which gives UTC days (an edited URL would not, chapter 7).

Window	Visitors	Visits	Views	Expected visitors	Expected views
17-18 Nov	64	71	166	66 pd + 2 = 68 (83 visits)	164 + 7 = 171
19 Nov	12	12	40	8 + 4-5 = 12-13	27 + 17 = 44
20 Nov	10	10	26	9 + 1 = 10	25 + 1 = 26
17-20 Nov	86	93	232	83 + 8 = 91	216 + 25 = 241

- **20 Nov exact** (10 visitors, 26 views); **19 Nov within one visitor**, 4 views short.
- **Thailand 4 on 19 Nov** (the manual round: two laptops on one line, the phone before and after its IP switch, P2 merged with P1's second IP), 1 on 20 Nov (the stray visit), 6 over 17-20 Nov (+ the Click Map visit).
- **France 3 on 19 Nov, 4 on 20 Nov: exact.** Singapore 6 over 17-20 Nov (the data-centre group).
- **17-20 Nov's 86 visitors = 64 + 12 + 10**, the sum of the days. Umami's salt rotates monthly, so it could recognise a returning visitor, but every returning persona came from a new IP each day; only the midnight pair kept its IP.
- `app.privatrak.com` 1 in Referrers: the Click Map visit.

10.4 Pirsch (read 20 Nov, ~11:30 UTC, through its API with `tz=UTC`)

Pirsch's dashboard can only show the domain's zone (Asia/Bangkok), so these are read through its statistics API (`/statistics/total`, `/country`) with `tz=UTC`, with the OAuth client the MCP server uses.

Window	Visitors	Sessions	Views	Expected visitors (pd + extras)	Expected views
15 Nov (r2)	43	53	132	46 pd (74 visits)	137
16 Nov (r3)	47	63	201	46 pd (97 visits)	197
17-18 Nov	64	79	195	68 + 2 = 70	194 + 7 = 201
19 Nov	13	14	41	9 + 4-5 = 13-14	28 + 17 = 45
20 Nov	11	11	29	10 + 1 = 11	28 + 1 = 29
17-20 Nov	88	104	265	87 + 8 = 95	250 + 25 = 275

- **20 Nov exact; 19 Nov exact on visitors, 4 views short** (the manual round's quick reloads, as in Umami).
- **France exact on 19 and 20 Nov (3, 4); Thailand 4 on 19 Nov, 1 on 20 Nov, 1 on 17-18 Nov (the Click Map visit).** No Brazil anywhere: Pirsch places the exits Fathom calls Brazil correctly.
- 17-20 Nov's 88 = 64 + 13 + 11: no recognition across days (a visitor hash includes the date).

10.5 Matomo Cloud (read 20 Nov, ~11:35 UTC, through its Reporting API)

`VisitsSummary.get`, `VisitFrequency.get`, `UserCountry.getCountry`, `Actions.get`. Matomo identifies visitors by the `_pk_id` cookie, which the persona state files carried across days.

Window	Visits	Returning visits	Page views	Expected visits	Expected returning	Expected page views
15 Nov (r2)	28	2	71	64 (44 pd)	–	123
16 Nov (r3)	36	3	102	77 (44 pd)	–	161
17-18 Nov	49	10	117 actions	78 (58 pd)	–	150
19 Nov	8	6	19	6 + 2 (manual round)	6	23 + manual
20 Nov	7	6	16	6 + 1 (stray)	6	16 + 1
17-20 Nov	64	22	138	90 (70 pd)		189

- **The first tool that recognises returning visitors, and exactly:** all 6 lab visits on 19 Nov and all 6 on 20 Nov are "returning" (every one is a persona Matomo had seen before, through its cookie), and the new visits are the manual round (2: Thailand) and the stray visit (1). The cookie-less tools above count every one of them as new.
- **On 19 and 20 Nov Matomo counts every visit it was sent**; the 17-18 Nov undercount (49 of 78) is concentrated on the day-1 burst. **Part of it is Matomo's 30-minute visit:** a persona's lab visits within 30 minutes of each other are one visit in a cookie tool. Grouping the delivered visits that way gives 59 for 17-18 Nov, not 78. **The rest is VPN visits:** matching Matomo's visitor log (`Live.getLastVisitsDetails`, 74 visits 17-20 Nov) against the 89 r4 visits Matomo was sent (by time and landing page, published with the data) leaves 12 visits with no Matomo visit: **11 of the 13 NordVPN visits** (exits on PacketHub S.A. in DE, GB, US and Datacamp in the US; every browser and every consent choice) and 1 residential visit. Matomo kept all 10 data-centre visits (NordVPN Singapore, GSL Networks), both Clouvider (GB) visits and one PacketHub visit, and every marked and agent-like visit. On 20 Nov it also dropped the Claude in Chrome visit and the two page-weight runs, which came from a laptop on the same PacketHub DE network. Matomo's script answered 204 to all of them. No IP or user agent is excluded in the site or global settings; the system settings (where a spam-prevention or IP-range filter would sit) are not readable with our access, so the mechanism is not identified. 10 Matomo visits hold two manifest visits each (the 30-minute merge).
- **Singapore 10 on 17-18 Nov:** Matomo counted all 10 data-centre visits (it dropped the pilot's in its first days).
- France 2 on 19 Nov (3 sent: one fewer), 3 on 20 Nov (exact).

For every tool, visits grouped by a 30-minute gap per persona (the session rule of most cookie tools), 17-18 Nov, delivered visits: Matomo 77 → 59, PostHog 65 → 51, Mixpanel 68 → 52, Amplitude 81 → 62, Clarity 82 → 61, Mouseflow 80 → 59, LogRocket 95 → 69, GA4 90 → 67, Cloudflare 93 → 68, Umami 81 → 68, Pirsch 97 → 71, Fathom 97 → 71, Plausible 37 → 26. A tool's "visits" or "sessions" should sit between the two numbers, depending on how it cuts a visit.

10.6 Expected numbers for every tool and window

The published `expected-all.json` holds, per tool and window, the delivered visits, personas, person-days, page views, France, funnel, downloads, outbound, 404 and purchases, and for cookie tools the **returning visit-days**: delivered visits whose persona had an earlier delivered visit to the same tool on an earlier day. The extras (visits not in the manifest) come on top: 17-18 Nov 2 visitors / 7 page views, 19 Nov 4-5 / 17, 20 Nov 1 / 1. The 15 and 16 Nov windows include series r2 and r3 and the check visits of those days.

10.7 Amplitude (read 20 Nov, ~12:00 UTC, Marketing Analytics, UTC range in the URL)

Window	Visitors (uniques)	Sessions	Page views	Expected personas / pd	Expected page views
15 Nov (r2)	37	38	86	38 pd	113
16 Nov (r3)	40	42	120	40 pd	156
17-18 Nov	39	54	131	41 personas, 60 pd	164 + 7
19 Nov	9	9	30	7 + manual round	24 + 17
20 Nov	7	7	17	7 + 1	20 + 1
17-20 Nov	**42**	70	178	41 personas (+ extras)	208 + 25

- **Amplitude recognises visitors across days**: 39 + 9 + 7 = 55 day-visitors, but 42 over the four days, so 13 visitors were recognised as the same person on another day. 42 sits right at the 41 personas it was sent plus the few extra browsers. (Amplitude keeps a device ID in browser storage; the persona state files carried it.)
- Page views are short of delivery throughout (consent: the decliners' later events stop; the expected numbers are upper bounds), and exact in sum: 131 + 30 + 17 = 178.

10.8 Mouseflow (read 20 Nov, ~12:10 UTC, "Your first dashboard", `fromdate`/`todate`)

Window	Visitors	Sessions	Page views	Expected personas / pd	Expected page views
15 Nov (r2)	40	41	92	39 pd	117
16 Nov (r3)	45	48	113	39 pd	176
17-18 Nov	40	55	111	38 personas, 58 pd	165 + 7
19 Nov	7	7	19	6 + manual round	18 + 17
20 Nov	5	5	11	7 + 1	20 + 1
17-20 Nov	**43**	67	141	38 personas (+ extras)	203 + 25

- **Mouseflow recognises visitors across days** too: 40 + 7 + 5 = 52 day-visitors, 43 over the window (9 recognised).
- Counts are recorded sessions only (500 a month on the free plan), so page views stay well under delivery, worst on 20 Nov (11 of 21).

10.9 Microsoft Clarity (read 20 Nov, ~12:20 UTC, dashboard, `date=Custom&start=…&end=…` in UTC milliseconds)

Window	Sessions	Bot sessions excluded	Unique users	Sessions with returning users	Pages per session	Expected visits	Expected returning
15 Nov (r2)	77	30	75	2	1.27	41 pd (r2 + checks)	–
16 Nov (r3)	134	27	128	0	1.31	41 pd	–
17-18 Nov	112	46	108	2	1.14	84 visits	15 same-day
19 Nov	27	7	26	1	1.15	6 + manual round	6
20 Nov	17	4	16	2	1.06	7 + 1	7

Window	Sessions	Bot sessions excluded	Unique users	Sessions with returning users	Pages per session	Expected visits	Expected returning
17-20 Nov	156	57	**148**	5	1.13	97 visits, 40 personas	33

- **Clarity recognises almost nobody**: 148 unique users over four days for 40 personas (+ extras), and 5 returning sessions where 33 returning visit-days were sent. This is consistent with what the page-weight runs showed: Clarity sets its `_clck` cookie only after consent, and most personas ignored or declined the banner.
- **More sessions than visits every day** (27 on 19 Nov for about 10 visits, 17 on 20 Nov for 8): Clarity cuts sessions finer than a visit, as on 17-18 Nov.
- Bot sessions excluded on every day, also on 19-20 Nov when only residential person-like visits and real people came: 7 and 4.
- 17-20 Nov: Smart events Submit form 12, Order success 10, Checkout 10, Plan selected 7, Search 5, Purchase 5 + 5 (its own and ours), Outbound click 4; JavaScript errors "lab: save draft failed" 3; dead clicks in 4 sessions, rage clicks 0; Contact funnel 25 → 0 → 0; referrers led by the site itself (68), `app.privatrak.com` 1 (the Click Map visit).

10.10 The tools read through their MCP servers (20 Nov, ~11:40-12:40 UTC)

PostHog, Mixpanel, Privatrak, Cloudflare, LogRocket, Sentry and Clarity were read by a headless assistant (Claude Code, Opus) per server, read-only, with one brief (the six windows, the ten areas, the midnight hours and the manual round's hour). Their full answers are in Appendix G. GA4's server was read the same way after a fresh sign-in; its windows are its own (Los Angeles days rebuilt into UTC from hourly data).

Windows: W1 15 Nov, W2 16 Nov, W3 17-18 Nov, W4 19 Nov, W5 20 Nov (to the read time), W6 17-20 Nov. Visitors / sessions or visits / page views per window:

Tool	W1 15 Nov	W2 16 Nov	W3 17-18 Nov	W4 19 Nov	W5 20 Nov	W6 17-20 Nov
PostHog (persons / sessions / page views)	41 / 42 / 84	45 / 47 / 116	41 / 53 / 106	9 / 9 / 20	5 / 5 / 12	**45** / 67 / 138
Mixpanel (users / sessions / page views)	43 / 43 / 104	46 / 48 / 134	40 / 54 / 124	6 / 6 / 23	4 / 4 / 12	**41** / 64 / 159
Privatrak (visitors / page views; automated)	62 / 145; 17	50 / 208; 17	72 / 200; 25	13 / 43; 9	10 / 28; 5	95 / 271; 39
Cloudflare (visits / page views)	56 / 103	78 / 161	95 / 196	15 / 42	10 / 26	120 / 264
LogRocket (users / sessions / page views)	39 / 56 / 110	43 / 63 / 166	47 / 98 / 199	14 / 14 / 42	11 / 11 / 29	**51** / 123 / 270
Sentry (replays / distinct IPs)	62 / 31	74 / 31	78 / 43	10 / 9	7 / 7	95 / 59
Clarity (users / sessions / page views)	75 / 77 / 98	128 / 134 / 176	108 / 112 / 128	26 / 27 / 31	16 / 17 / 18	148 / 156 / 177

(Clarity's MCP numbers equal its dashboard's above. W5 was read at about 11:40 UTC, with nothing after day 4's run but the stray visit.)

- **Who recognises a visitor across days** (W6 against the sum of the days): PostHog 45 for 67 day-visitors, Mixpanel 41 for 63, LogRocket 51 for 95, Amplitude 42 for 55, Mouseflow 43 for 52, Matomo returning 6 of 6 and 6 of 6 on 19-20 Nov. **Nobody recognises across days:** Privatrak (95 = 47 + 25 + 13 + 10), Fathom, Plausible, Umami, Pirsch (all by design: daily hashes), Cloudflare (no visitor concept) and **Clarity** (148 users for 40 personas; 5 returning sessions), the one cookie tool that does not.
- **PostHog and Mixpanel name returning visitors on 19-20 Nov:** PostHog 5 of 9 seen before on 19 Nov (the other 4 are the manual round) and 5 of 5 on 20 Nov; Mixpanel 5 of 6 and 4 of 4.
- **The series start fresh:** LogRocket's users of W1, W2 and W6 add up to the whole period's, so no user carried over from r2 to r3 to r4, as the runner intended (empty browser state per series).
- **The midnight pair (17 Nov 23:00 to 18 Nov 01:00):** PostHog, Mixpanel and LogRocket count the same visitor in both hours and once in the window (cookie); Sentry has the same 2 IPs in both hours as new replays; Privatrak counts a visitor active on both sides of midnight on both days (daily key); Cloudflare counts each visit once in the hour it began; Clarity had different users in the two hours (0 in both).
- **The manual round (19 Nov 07:00-08:00):** PostHog 5 visitors / 5 sessions / 10 page views, all Thailand (3 Mobile Safari, 1 Chrome, 1 Safari: the phone's IP switch makes it two); LogRocket 5 users, all Thailand; Cloudflare 7 visits; Mixpanel 1 visitor (Safari on the Mac: the Chrome visit came from our work browser, which sends Do Not Track,

and the phone declined the consent banner); **Clarity 17 sessions / 16 users from Thailand**: it split the phone's quick reloads into sessions of their own.

- **Brazil:** Sentry puts 21 of 78 replays of 17-18 Nov and 2 on 19 Nov in Brazil, like Fathom. PostHog, Mixpanel, LogRocket, Cloudflare, Clarity, Pirsch and Umami have no Brazil at all. Two geolocation databases place some of the residential proxy exits in Brazil.
- **Singapore:** 10 visitors on 17-18 Nov in PostHog, Mixpanel (9), LogRocket, Cloudflare, Clarity, Matomo: the data-centre group, kept.
- **Privatrak marks automated page views** and keeps them: 25 of 200 on 17-18 Nov, 9 of 43 on 19 Nov (the residential "marked" and "agent" personas; none of the manual round).
- **Privatrak's 15 Nov:** 62 visitors of which 15 have no page view (r2's split user agent: the leave-time events ran under another visitor ID).

10.11 What the browsers themselves held back

What each tool's script did for the visitors it is meant to respect or filter, all r4 visits (requests answered 2xx = "sent"):

Visitor type	Visits	Tools that sent nothing	Notes
Do Not Track + GPC (p05, p11, p17)	14	**Mixpanel (0 of 14), Clarity (0 of 14)**	every other tool sent all of them (Matomo, PostHog, Sentry missed 3: those were declines)
`navigator.webdriver` (marked)	17	**Plausible (0 of 17), Mouseflow (0 of 17), PostHog (4 of 17)**	Plausible's and Mouseflow's scripts stop on webdriver; PostHog's mostly
agent-like (markers hidden, program-like input)	16	none	everyone sent; Plausible dropped 10 server-side (Chromium)
uBlock Origin Lite	5	**all but Privatrak**	14 scripts blocked; Privatrak's not on the lists
Firefox strict tracking protection	6	all but Privatrak, Pirsch, LogRocket (4 of 6), Fathom	GA4 blocked outright
data-centre exit (NordVPN Singapore)	10	none client-side	Plausible dropped 9 server-side
VPN exits	15	none client-side	Plausible dropped 10 server-side

So of the tools, Mixpanel honours Do Not Track, and Clarity sends nothing for visitors with both Do Not Track and Global Privacy Control (with Do Not Track alone it recorded a visit, chapter 11); "ignores automated browsers" is true of Plausible and Mouseflow (and mostly PostHog) at the script, and of Clarity afterwards ("bot sessions excluded"). Privatrak stores them and marks them.

10.12 What the 15 tools cost a visitor (20 Nov, 12:13 UTC)

One 3-page visit (`/`, `/article`, `/pricing`, 8 s each) in headed Playwright Chromium from the laptop, once ignoring the consent banner and once accepting it; both are labelled visits (`weight-ignore`, `weight-accept`) and recorded as extras. Bytes are transferred sizes (headers + bodies) per tool's hosts.

Tool	Requests	Downloaded	Uploaded	Hosts
Amplitude	27	309 KB	14 KB	cdn, sr-client-cfg, api2.amplitude.com
PostHog	15	254 KB	5 KB	eu-assets.i.posthog.com
GA4 (GTM container)	7-9	183 KB	6-8 KB	googletagmanager.com, region1.google-analytics.com
LogRocket	10-12	150 KB	**147-153 KB**	cdn/r.lr-ingest.com
Mixpanel	10-11	142 KB	8-12 KB	cdn.mxpnl.com, api-eu.mixpanel.com
Sentry	9	77 KB	27 KB	sentry-cdn.com, ingest
Matomo	12-14	64 KB	10-12 KB	cdn.matomo.cloud, the instance
Mouseflow	3	55 KB	2 KB	cdn.mouseflow.com
Clarity	10-13	30 KB	13-15 KB	clarity.ms (+ bing.com after consent)
Privatrak	9-10	20 KB	6-7 KB	api.privatrak.com
Cloudflare	6	10 KB	5 KB	cloudflareinsights.com
Umami	6	7.5 KB	3.7 KB	cloud.umami.is, gateway.umami.is

Tool	Requests	Downloaded	Uploaded	Hosts
Fathom	6	4.8 KB	4.0 KB	cdn.usefathom.com
Pirsch	6	4.1 KB	2.9 KB	api.pirsch.io
Plausible	3	3.2 KB	0.8 KB	plausible.io
All 15	**141-148**	**1,315 KB**		for a 3-page visit

Cookies. Ignoring the banner already leaves 11 cookies (no tool was told to wait for consent; the lab sets no consent defaults): Matomo `_pk_id` (393 days) and `_pk_ses`, GA4 `_ga` and `_ga_…` (400 days), Amplitude `AMP_…`, `AMP_MKTG_…` and `EXP_…_identity` (365 days), Mixpanel `mp_…` (365), PostHog `ph_…_posthog` (365), LogRocket `_lr_tabs_` and `_lr_hb_` (1 day). **GA4, Amplitude, Mixpanel and PostHog set theirs on `.privatrak.com`, the whole parent domain** (so the dashboard at app.privatrak.com receives them too). Accepting adds 11 more: **Clarity's `_clck` and `_clsk` appear only after consent**, with Microsoft's `MUID` on `.clarity.ms` and `.bing.com`, and Matomo's `mtm_consent` and `_pk_hsr`. Clarity's missing cookie without consent is why it recognised almost nobody across days (Clarity section above): most personas ignored or declined the banner.

Browser storage on the site's origin (local / session), without consent: Mixpanel `__mprec_…`, `__mpq_…`, `mp_tab_id_…`; Amplitude `AMP_unsent_…`, `AMP_remote_config_…`, `AMP_SR_START_…`, `EXP_…`, `AMP_PAGE_VIEW`, `AMP_URL_INFO`; PostHog `ph_…_posthog`, `…_window_id`, `…_session_registered_properties`; LogRocket `_lr_id_`, `_lr_dat_`, `__lr_navigation_history_v1`, `_lr5_`; Sentry `sentryReplaySession`; after consent also `__mp_opt_in_out_…`, `__ph_opt_in_out_…` and Clarity `_cltk`. Privatrak, Plausible, Fathom, Umami, Pirsch and Cloudflare stored nothing.

10.13 The comparison areas, 17-18 Nov (what each tool reports beyond counting)

Bounce rate. 57 of the 102 r4 visits on 17-18 Nov saw one page (56%); 26 of those also clicked nothing (25%: a lab visit clicks a button on its one page, a download or outbound visit clicks a link).

Tool	Bounce rate 17-18 Nov	What it counts
Clarity	92.9%	sessions with one page view (its sessions are cut finer than visits)
LogRocket	52.0%	single-page sessions
Matomo	39%	visits with one action (a download or outlink is an action)
Pirsch	38.0%	sessions with one page view
Amplitude	35.2%	sessions with one page view
Plausible	13%	visits with one page and no engagement event
PostHog	3.8%	sessions with one page view and under 10 s, no autocapture
Truth	56% single-page, 25% single-page without a click	

So the same visits read as anything from 4% to 93% bounce.

Single-page-app routes (`/app/forms`, `/app/answers`, `/app/settings` by `history.pushState`): counted by Privatrak, Cloudflare, Clarity, Pirsch, Sentry (replays), Matomo (as `/app` actions), Fathom and Umami; **PostHog shows only `/app`** (4 views on 17-18 Nov, none of the routes), so its default setup records no pushState page views.

Query strings: kept as separate pages by Matomo (`/product?id=booking` 5, `/product?id=quote` 5, `/?ref=producthunt` 3, `/article?ref=producthunt` 1), Mixpanel (a property: `?ref=producthunt` 5, `?id=booking` 4, `?id=quote` 4, `?q=quote` 3) and Sentry (`/checkout?plan=team`); stripped by Privatrak, Plausible, Pirsch, Cloudflare, Clarity ("no query strings stored"), PostHog, Umami and Fathom. **Pirsch kept a URL fragment as a page:** `/#st-picker=https://app.privatrak.com&mode=click-map` (the Click Map visit), so a hash can end up in its page list.

UTM campaigns (newsletter `November-Launch`, ads `forms-us`, ChatGPT `utm_source=chatgpt.com`): reported by Privatrak, PostHog, Mixpanel, Plausible, Pirsch, Matomo ("Campaigns" channel 6), LogRocket and Clarity; **Fathom shows "No data to display"** for campaigns; Cloudflare has no campaign report. On 20 Nov **the ChatGPT app appended `utm_source=chatgpt.com` to the link by itself**, so the app visit is attributable where the in-app browsers of WhatsApp and iMessage sent no referrer at all.

Error, slow and dead clicks per element on `/lab` (truth: "Duplicate form" dead in 7 visits and rage in 4; "Save draft" throws a TypeError):

Tool	"Duplicate form"	"Save draft" (error)	Others
Privatrak	7 dead, 4 rage	2 error, 2 dead, 1 rage	Delete form 2 dead; chart 2 dead; card 2 dead; slow 0
PostHog (SQL)	6 dead, 1 rage	2 dead, 1 rage	Publish form 1 dead, 1 rage
Mixpanel	`button#b` 11 dead, 1 rage	`button#a` 4 dead	
Sentry	`button#b` 4 dead (replays)	2 errors ("lab: save draft failed")	1 Mouseflow load error
Clarity	not flagged (11 plain clicks in the heatmap)	9 error clicks (3 JS errors)	paragraph 9 dead, new-tab link 1 dead
Mouseflow (heatmap, 7 days)	17 clicks	15 clicks with an error mark	Publish form 10, chart 10
Matomo (heatmap, 7 days)	`button#b` 31 clicks	`button#a` 13 clicks	no dead/rage notion
Amplitude (17-18 Nov)	5 dead	2 dead	Delete form 2, Publish form 1
LogRocket	7 dead sessions	–	rage: none found

No tool reported a slow click on "Publish form" (it answers after a delay).

Devices and browsers 17-20 Nov. The personas' engines were Chromium 64, WebKit 32, Firefox 26 visits; the tools name them Chrome / Safari / Firefox / Edge and Mobile Safari. Plausible's browser split (Safari 24, Firefox 18, Chrome 6) is the non-Chromium remainder plus the real Chrome visits; GA4, PostHog, Mixpanel, LogRocket, Cloudflare and Pirsch split close to the engines.

11. Server-side feeds, Cloudflare, and the AI and app rounds

AI assistants' fetchers run no JavaScript, so none of the 15 snippets sees them. Before the AI rounds the lab therefore got a server-side feed into every tool that documents one, and a CDN in front that classifies bots at the edge. Then the rounds ran: AI assistants fetching a page for a person, a browser agent, and links opened from phone apps. Everything in this chapter happened on 20 Nov 2026, after series r4's last visits. The MCP answers behind it are Appendix H.

11.1 The server-side sender

A small program beside the web server read the site's access log and passed each request on to every tool with a documented server-side path, each the way its own docs describe:

Tool	Requests	How
Privatrak	every request but the probe; its reporter keeps crawler page requests (its own pattern list)	`@privatrak/tracker/server` → `POST /api/server-requests`
Matomo	GET requests from Matomo's seven documented AI chatbot user agents, static files left out	HTTP Tracking API, bot mode (`recMode=1`): AI Chatbots reports, no visits
PostHog	every request but the probe and page assets	`$http_log` events (`/batch/`), classified at query time
Mixpanel	HTML pages answered to a crawler-list user agent	`/import`, `$mp_web_page_view` with `$mp_raw_user_agent`
Plausible	same	Events API `pageview` with the crawler's user agent
Pirsch	same	`hit/batch`, client-credentials token
Umami	same	`gateway.umami.is/api/send`
GA4	same	Measurement Protocol `page_view` with `user_agent` and `ip_override`
Amplitude	same	HTTP V2 `[Amplitude] Page Viewed`

The page-view APIs stand in for the script on a backend, so they got only crawler pages (Privatrak's published crawler list, which leaves out browser-like and automation patterns); otherwise every person would count twice. Our own uptime check (`SentryUptimeBot`, about one request a minute) was left out for them. Fathom, Clarity, Mouseflow, LogRocket, Sentry and Cloudflare Web Analytics document no server-side page or request ingestion. Clarity's one server-side path, Bot Activity, shows a CDN's logs (Cloudflare's, here), which this chapter reads at the source instead. Addresses reached the tools cut to the network (/24, /48), as the access log stores them. The send log, one line per request with the tool's answer and its own verdict where it gives one, is published (`server-side-sends.jsonl`).

11.2 Cloudflare in front of the site

- **From 11:10 UTC the site ran behind Cloudflare** (free plan), only this hostname proxied. Before the switch, the access log was set to cut the visitor address Cloudflare passes on (`Cf-Connecting-Ip`) to the network, as for every other address.
- **Settings:** SSL Full (strict); Bot Fight Mode, AI Labyrinth, Browser Integrity Check, Email Obfuscation, robots.txt management, Markdown for Agents, Speed Brain and Rocket Loader off; every AI crawler and agent allowed.
- **Cloudflare injected its own beacon on activation.** HTML served to browsers carried Cloudflare's real-user-monitoring script (`beacon.min.js`, a new token, not the site's Web Analytics), although its Speed settings showed it as disabled. Found by comparing pages through Cloudflare with the origin; switched off completely at 11:20 UTC, pages byte-identical to the origin since. No visit ran in between.
- Cloudflare adds its country per request (`Cf-Ipcountry`), which this chapter quotes.

11.3 The rounds as they ran

Ground truth: the access log (with Cloudflare's country per request) and the probe's `#r=` labels where a page ran scripts.

Time (UTC)	Round	What reached the site
11:44:48	ChatGPT (free account): "open …/article?via=chatgpt and summarise"	`ChatGPT-User/1.0` fetched `/article?via=chatgpt` and `/` (Cloudflare: NL); summary correct
11:45	Perplexity (free, Search): the same prompt with `via=perplexity`	**no page fetch**; one `/robots.txt` with a Mac Chrome user agent; Perplexity answered that it couldn't retrieve the page and summarised Privatrak's site instead
11:47:10	Claude, through Claude Code's web fetch tool	`Claude-User (claude-code/…)` fetched `/article?via=claude-code-webfetch` (DE)
11:49	Claude in Chrome, an AI agent driving a real Chrome	`/?via=claude-in-chrome` → `/pricing` → `/contact`, scripts ran, no form sent
–	ChatGPT agent mode, Perplexity Computer	need paid plans; not run
11:53	heatmap viewers (Clarity, Mouseflow, LogRocket)	no page loads: Clarity renders its stored snapshot; Mouseflow fetched `/style.css` 4× (`Mouseflow/1.0.0`); LogRocket's `LogRocket-AssetCacher` fetched `/style.css` at 11:49
11:56-11:57	iPhone (on Wi-Fi), a link sent in WhatsApp (a Slack URL)	`WhatsApp/2.23.20.0` link preview (206), then Safari: 6 pages, **no referrer**
11:58	iPhone, a link in a ChatGPT app reply	Apple's link-preview fetcher (`Mac OS X 10_11_1 … AppleWebKit/601.2.4`) for the WhatsApp and ChatGPT links; then the app's browser opened `/article?via=app-chatgpt&utm_source=chatgpt.com`: **the ChatGPT app appended `utm_source=chatgpt.com` itself**; no referrer
11:59-12:00	iPhone, iMessage	Apple's link preview 2× and iOS `NetworkingExtension` asking for `apple-touch-icon` (404); then Safari, 5 pages, no referrer
12:05:15	Gemini app	user agent `Google` fetched `/article?via=gemini` (BE)
~12:05	Perplexity Comet (search; its agent needs a paid plan)	**no fetch**

11.4 What every tool made of them (read 12:20-12:45 UTC)

What reached the site (access log, behind Cloudflare since 11:10; country is Cloudflare's `Cf-Ipcountry`):

Time	Request	Ran JS	Country
11:44:48	ChatGPT-User: `/article?via=chatgpt`, then `/`	no	NL
11:45:18	OAI-SearchBot: `/robots.txt` (not asked for)	no	US
11:47:10	Claude-User (Claude Code WebFetch): `/article?via=claude-code-webfetch`	no	DE
11:49:07	Claude in Chrome agent: `/?via=claude-in-chrome` → `/pricing` → `/contact`, real Chrome, `DNT: 1`	yes	DE
11:56:39	WhatsApp/2.23.20.0 link preview: `/article?via=app-slack`	no	TH
11:56:55	iPhone, Slack link opened from WhatsApp, Safari: `/article?via=app-slack`, `/article`, `/product`, `/pricing`, `/contact`, `/app`	yes	TH
11:58-11:59	Apple link preview (`Mac OS X 10_11_1 … facebookexternalhit/1.1 Facebot Twitterbot/1.0`): 6 × `/article?via=app-whatsapp/-chatgpt/-messages`	no	TH
11:58:39	iPhone, ChatGPT app's in-app browser: `/article?via=app-chatgpt&utm_source=chatgpt.com`, `/article`, `/pricing`, `/product`; consent accepted	yes	TH
11:59:48	iPhone, iMessage link, Safari: `/article?via=app-messages`, `/article`, `/product`, `/contact`, `/pricing`	yes	TH
12:05:15	Gemini app fetch, user agent `Google`: `/article?via=gemini`	no	BE
12:12:55	page-weight runs (Playwright Chromium, `webdriver: true`): `/?via=weight-ignore`, `/?via=weight-accept`, each + `/article`, `/pricing`	yes	DE

Perplexity (search) and Comet (search; its browser agent needs the Pro plan) made no request at all. The laptop used for the agent and the page-weight runs was on a VPN with a German exit (the same NordVPN network as the series' German VPN personas: Cloudflare DE; Umami, Plausible, PostHog, Mixpanel and LogRocket Germany; **Fathom and Sentry: Brazil**); the phone was in Thailand.

Two conditions shaped what the cookie tools saw, both checked:

- **The two Safari visits ran with a stored consent decline.** The phone declined the banner in Safari on 19 Nov during the manual round; the site keeps the choice in `localStorage` and applies it on every load, so PostHog, Mixpanel and Amplitude were opted out, GA4 and Clarity told "denied", Mouseflow and Sentry's replay stopped. The ChatGPT app's browser has its own storage; there the banner showed and Accept was clicked.
- **The agent's Chrome sends Do Not Track** (`DNT: 1`, no GPC).

AI fetchers and link previews (no JavaScript; only server-side paths can see them)

What the server-side sender delivered (`server-side-sends.jsonl`) and what each tool shows:

Tool	Sent	ChatGPT-User (2)	Claude-User (1)	"Google" / Gemini (1)	Apple preview (6)	WhatsApp (1)
Privatrak	crawler pages (its list)	AI assistants: ChatGPT, 2 answer fetches, 0 visitors	Claude, 1 answer fetch	crawler `^Google$`, purpose other, **no assistant** (Google does not document it)	crawler `facebookexternalhit`, `/article` **4** (5-s de-duplication merges same-page pairs)	not sent (not on its list)
Matomo	chatbot UAs only, bot mode	AI Chatbots "ChatGPT", 2 requests, no visit (real-time report; day report not yet archived)	"Claude", 1	not sent (not a Matomo chatbot name)	not sent	not sent
PostHog	every request (`$http_log`)	AI Agent / ai_assistant / "ChatGPT"	AI Agent / "Claude User"	**Regular** (not recognised as a bot)	Bot / social_crawler named **"Facebook"**	Bot / social_crawler "WhatsApp"
Mixpanel	crawler pages (`/import`)	2 page views, **no bot label**, channel Direct, counted as users	1 page view, no label	1 page view, no label	6 page views, one user	not sent
Amplitude	crawler pages (HTTP V2)	2 "Viewed /article Page", no label (Live Events)	1	1 (geo US)	6	not sent
GA4	crawler pages (Measurement Protocol, 204)	1 session, 2 page views, device "smart tv", channel Unassigned, **no bot label**, counted as a user	1 session, 1 page view, no label	1 session, 1 page view, no label	5 of 6 page views, one session	not sent
Plausible	crawler pages (Events API)	dropped (202 + `x-plausible-dropped`)	dropped	dropped	dropped	not sent
Umami	crawler pages (`/api/send`)	dropped (`beep boop`)	dropped	dropped	dropped	not sent
Pirsch	crawler pages (`hit/batch`, 200)	nothing appears	nothing	nothing	nothing	not sent
Cloudflare	sits in front (edge)	edge log "AI Assistant" (verified bot); AI Crawl Control chart 2	edge: no category; AI Crawl Control chart 1	no category	no category	status 499, no category

Tool	Sent	ChatGPT-User (2)	Claude-User (1)	"Google" / Gemini (1)	Apple preview (6)	WhatsApp (1)
Fathom, Clarity, Mouseflow, LogRocket, Sentry	no server-side path*	–	–	–	–	–

* Clarity's Bot Activity reads a CDN's logs (for Cloudflare, a Logpush job created from an API token). It is Cloudflare's data shown in Clarity, and Cloudflare was read directly, so it was not connected (decided 20 Nov).

- **GA4 (read on 21 Nov, once 20 Nov was processed)** shows no data for 20 Nov after 13:00 UTC, so the 14:24 repeat of the agent visit is not in it.
- **Only three tools name the AI fetchers as AI fetchers**: Privatrak (AI assistants report, with the documented-only rule), Matomo (AI Chatbots, for its seven names) and PostHog (query-time classification of `$http_log`). Cloudflare labels ChatGPT-User only.
- **Gemini's bare `Google` user agent is recognised by nobody** as Gemini: PostHog calls it a regular visitor, Mixpanel, Amplitude and GA4 count it as a user, Privatrak keeps it as an unattributed crawler by design.
- **Mixpanel, Amplitude and GA4 count every fetch as a visitor's page view**: 4 of Mixpanel's 7 "users" after 10:00 are fetchers.
- **Apple's link preview names itself Facebook**: its user agent carries `facebookexternalhit`, so PostHog files it under Meta and Privatrak under the Facebook crawler pattern.
- **OAI-SearchBot** fetched `robots.txt` a few seconds after ChatGPT-User: Privatrak counts 1 ChatGPT search crawler request, PostHog "OpenAI Search", Cloudflare "Search Engine Crawler".

The Claude in Chrome agent visit (JavaScript ran, real Chrome, DNT on)

No tool flagged it as automated or as an agent; nothing in the request said so.

Recorded as a normal visitor	Not recorded
Plausible (Germany, 3 pages), Fathom (**Brazil**), Umami (Berlin), Pirsch (Germany), PostHog (Germany, channel Direct), Amplitude, Clarity, Mouseflow (live session), LogRocket (Berlin, "human-like"), Sentry (replay, **Brazil**), Cloudflare Web Analytics (Germany), GA4 (Germany, channel Direct, a returning user)	**Mixpanel** (honours DNT), **Matomo** (drops this VPN network; see below), **Privatrak** (that browser blocks it; the re-run: recorded, not flagged; see below)

Privatrak missed the first run because of our own browser. The agent ran in the Chrome we work in, which blocks Privatrak's ingest so that we do not track ourselves. The API log has the tracker's settings request for each of the agent's three pages and no event request; a diagnostic page view in the same browser at 12:44 confirmed that only the ingest request failed, inside the browser. The visits Privatrak lost earlier (the Click Map visit, the stray visit, part of the manual round) were made in that browser too.

Re-run with the block off (14:24 UTC, `/?via=claude-in-chrome-2`, same browser and path). Privatrak recorded it: 3 page views and 2 clicks ("Pricing", "Contact"), none marked automated. Its agent-pointer rule (in its open tracker source) judges a click by the pointer move before it and never counts a page's first move as evidence, because Chrome sends one indistinguishable move after every page load. The agent clicked once per page, so each click's jump was that page's first move and nothing was judged; the rule's own notes say "A page an agent clicks once is not marked". So Privatrak, the one tool whose documentation describes a rule for agents driving a real browser, did not flag this agent either, as that documented limit predicts.

Matomo also lost the two page-weight visits from the same exit, although its script sent 12 and 14 requests in them. The exit was the same NordVPN network as the series' German VPN personas, and Matomo dropped 11 of the 13 NordVPN visits of the series too (section 10.5): Matomo Cloud discards visits from these VPN networks; the setting that does it is not visible to us.

The iPhone visits (in-app browsers send no referrer)

Tool	Slack link via WhatsApp (Safari, declined)	ChatGPT app (accepted, `utm_source=chatgpt.com`)	iMessage (Safari, declined)
Privatrak	Direct, 6 page views	page view keeps `utm_source`; **same visitor as the Slack visit** (the API saw the same address and browser), whose first page view had no tag, so **Direct** by the first-page-view rule	Direct, a second visitor (the carrier gave another address)
Plausible	**all three as ONE visit**, 15 page views, Direct, utm "(not set)"	– merged –	– merged –
Fathom	**one visitor**, 17 page views with the phone filter; `utm_source` stripped from the page and **in no report**	–	–
Umami	**one session**, 2 visits, 15 views	UTM source chatgpt.com (1 view)	–
Pirsch	Direct, 6 views	referrer **chatgpt.com**, utm_source chatgpt.com; the iMessage visit merged into this session (9 views)	merged
Matomo	visit 134 = Slack + iMessage merged, 11 actions, direct	visit 135: channel **"ai", ChatGPT**	merged into 134
PostHog	no browser events (opted out)	channel **"AI"** from utm_source, 4 page views	no browser events
Mixpanel	nothing (opted out)	utm_source chatgpt.com, channel **"Other Advertising"**, 3 of 4 page views	nothing
Amplitude	nothing (opted out)	session with all events, Thailand	nothing
Clarity	each page its own session, **twice** (12 sessions for 6 pages)	1 session, source chatgpt.com, channel "Other"	same split, 8 sessions, last `/pricing` missing
Mouseflow	Slack + iMessage as **one** session, 7 of 11 pages, tag "speed-browsing"	3 of 4 pages, tag `utm_source=chatgpt.com`	merged
LogRocket	recorded in full (it has no consent call, so it was never told about the decline); same user as iMessage	`/product` missing; utm only in the URL	recorded
Sentry	not recorded (replay stopped)	replay, 3 page loads	not recorded
Cloudflare WA	direct	direct (query strings not readable on Free)	direct
GA4	Slack + iMessage visits as **one** session, all 11 page views, Direct (recorded although consent was declined)	source `chatgpt.com / ai-assistant`, channel **"AI Assistant"**, 3 of 4 page views	merged

- **Nobody attributes the WhatsApp, Slack or iMessage visits**: no referrer, so Direct everywhere.
- **The ChatGPT app's `utm_source=chatgpt.com` is read five ways**: AI channel (PostHog, Matomo, GA4), a referrer (Pirsch), a UTM source only (Umami, Clarity, Mouseflow), "Other Advertising" (Mixpanel), nothing (Fathom; Plausible and Privatrak because the visit merged into the earlier untagged one from the same phone).
- **Visits from one phone within 3 minutes merge** in the cookieless tools (Plausible 1 visit, Umami 2, Pirsch 2 sessions, Matomo 2, Privatrak 2 visitors), and Clarity without consent splits every page into two sessions.

The page-weight runs (Playwright, `webdriver: true`)

Plausible and PostHog recorded nothing (their scripts stop on webdriver), Mouseflow nothing, Clarity nothing after 12:00; Matomo nothing (above). Privatrak stored all 6 page views marked automated. Mixpanel, Amplitude, Umami (one session for both runs), Fathom (one visitor, **Brazil**), Pirsch (one visitor, Germany), LogRocket, Sentry and GA4 (2 new users, 6 page views, Germany) counted them as people.

Sources: the MCP reads (Appendix H), the dashboards (read 12:20-12:45 UTC), and `server-side-sends.jsonl`.

11.5 What is still missing

- **ChatGPT agent mode and Perplexity Computer/Comet's agent** need paid plans; not run. Perplexity's search requested no page (one `/robots.txt` only), and Comet's search made no request to the site.
- **The phone round ran on Wi-Fi**, not mobile data; the in-app findings do not depend on the network.

12. Product features beyond the counts

What each tool offers around its numbers, from each vendor's own pages, opened on 20 Nov 2026: plans, sharing, email reports, alerts, export, retention, sampling, limits, consent, hosting, bot filtering and server-side ingestion. Every cell is sourced; "not found in docs" means the listed pages do not say it. This chapter is documentation, not a test: where the lab measured the same thing (bot filtering, DNT, server-side paths), chapters 10 and 11 hold the measurement.

12.1 Plans compared

Tool	Free plan / trial	Cheapest paid plan
Privatrak	Free forever: 10k events/mo, 1 project, 1 member	Starter $19/mo: 100k events, 3 projects, 5 members
GA4	Standard property is free	GA4 360 (price not found in docs)
Plausible	No free plan; 30-day trial, no card	Starter $9/mo: 10k pageviews, 1 site
Fathom	No free plan; 7-day trial, card required	$15/mo: 100k pageviews, 50 sites
Umami Cloud	Hobby $0: 100K events/mo, 1 site, no team members	Pro $20/mo: 1M events, 20 sites, 10 members
Pirsch	No free plan; 30-day trial, no card	Standard $6/mo: 10k pageviews, 50 sites, unlimited members
Matomo Cloud	No free plan; 21-day trial, no card	Business from €29/mo: 50k hits, 30 sites, 30 users
Cloudflare Web Analytics	Free	No paid tier for Web Analytics; rules need Pro or higher
PostHog	Free: 1M events, 5K recordings, 1 project, unlimited members	Pay-as-you-go: same free tier, then usage; 6 projects
Mixpanel	Free: 1M events, 10K replays, unlimited seats	Growth: first 1M events free; 1.5M events $140/mo ($100 yearly)
Amplitude	Free: 2M events, 10K replays, unlimited seats	Plus: "starts at $0", first 2M events free, card required
Microsoft Clarity	Free forever, no traffic limits	None
Mouseflow	Free: 500 sessions/mo, 1 site, unlimited users	Essential 25/mo (annual; currency not shown): 5k sessions
Sentry	Developer: 5k errors, 50 replays, 1 user	Team $26/mo annual ($29 monthly): 50k errors, unlimited users
LogRocket	Free: 1,000 sessions/mo	Core $83/mo (annual) for 10k sessions

12.2 Dashboard sharing

Tool	Public link / password / read-only users
Privatrak	Project members only (Owner/Admin/Member); no public link or viewer role found
GA4	Viewer role users; "copy link" (recipient access not stated); no public link found
Plausible	Shared links, optional password; Guest Viewer role. Shared links on Growth ($14) and up
Fathom	Private, passworded or public share URL; passworded viewers are view-only
Umami Cloud	Public read-only Share URL; password not found. Teams on Pro and up
Pirsch	Public dashboards, unique access links, view-only members; all on Standard
Matomo Cloud	Anonymous view access (public); view-only users; token_auth embeds
Cloudflare WA	Not found in docs
PostHog	Public link and embed; password protection only on Boost/Scale/Enterprise
Mixpanel	Public boards (Free: "Make Public" toggle); optional passcode; owner must enable
Amplitude	Public links on all plans (Free: limited allowance); optional password and expiry
Clarity	Share recordings/heatmaps with team or guests (guest links expire); Admin/Team member roles
Mouseflow	Session replays can be shared by link; no dashboard link found
Sentry	Public link per issue; dashboards are shared within the organisation only
LogRocket	Session URLs; public dashboard link not found in docs

12.3 Scheduled email reports

Tool	Finding
Privatrak	"Weekly summary" email every Monday (account setting)
GA4	Admins only: daily/weekly/monthly/quarterly, PDF or CSV, up to 50 reports
Plausible	Weekly and/or monthly emails, plus Slack reports; on Starter
Fathom	Weekly or monthly, one or several sites, on every plan
Umami Cloud	Pro and up only; frequency not stated
Pirsch	Daily, weekly, every 2–3 weeks, or monthly; on Standard
Matomo Cloud	Scheduled email reports on all plans
Cloudflare WA	Not found in docs
PostHog	Email/Slack subscriptions: daily, weekly, monthly, custom; Free listed ("Up to 5" label unclear)
Mixpanel	Board subscriptions by email/Slack, daily/weekly/monthly; plan not stated
Amplitude	Dashboard subscriptions on all plans: HTML email plus CSV; PDFs to Slack
Clarity	Opt-in weekly "Clarity digest" email
Mouseflow	Not found in docs
Sentry	Weekly report email every Saturday
LogRocket	Issues and Errors digests by email, Slack, Teams or webhook

12.4 Alerts / anomaly or traffic notifications

Tool	Finding
Privatrak	Only usage emails at 80% and 100% of the event limit; no traffic alerts found
GA4	Custom insights: threshold or "Has anomaly", optional email; 50 per property
Plausible	Traffic spike and drop email alerts with your own threshold; plan not stated
Fathom	Not found in docs
Umami Cloud	Not found (the notifications page covers product emails only)
Pirsch	Traffic spike notifications and no-traffic warnings; on Standard
Matomo Cloud	Custom alerts on all plans
Cloudflare WA	Not found in docs
PostHog	Threshold or anomaly alerts; Free up to 5, paid unlimited
Mixpanel	Paid only: Growth 5 per project; anomaly detection Enterprise only
Amplitude	Docs: all plans, Free 1 alert, Plus 2. Pricing page says Free "not included"
Clarity	"Drop in traffic" email when page views fall more than 50% week on week
Mouseflow	Pricing lists "real-time alerts" (Free too); help: JS-error notifications, daily or hourly
Sentry	Free: email alerts only. Paid: integrations and more alert types
LogRocket	Timeseries alerts (threshold or anomaly) by email, Slack, PagerDuty, webhook; up to 100

12.5 Data export and API

Tool	CSV/UI export · raw export · API (free?)
Privatrak	CSV export not found; REST API and MCP via API keys (2 keys on Free)
GA4	CSV/PDF/Sheets up to 100k rows; free BigQuery raw export (1M events/day batch); free Data API with quotas
Plausible	CSV needs an active trial or subscription; Stats API Business only; raw export Enterprise
Fathom	CSV downloads; Analytics API on all plans (each API call counts as a pageview)
Umami Cloud	Gzipped CSV export on Hobby; API only on Pro and up
Pirsch	CSV export and REST API on Standard; raw data Enterprise or via support
Matomo Cloud	Exportable widgets; HTTP API on all plans; raw export via API
Cloudflare WA	GraphQL API; CSV export not found

Tool	CSV/UI export · raw export · API (free?)
PostHog	API for all users; batch exports free for the first 1M rows/mo
Mixpanel	Free: CSV/PNG/PDF up to 10k rows; Query API Growth and up; raw export API plan not stated
Amplitude	Export API "on all plans" (docs); pricing says exports Growth/Enterprise only
Clarity	Downloads; Data Export API: 10 requests/day, last 1–3 days, 1k rows
Mouseflow	Pricing: no export or API on Free/Essential; help describes CSV downloads
Sentry	Free: no API access (pricing); Discover CSV export (plan unclear)
LogRocket	HAR and console logs per session; API/MCP on Core; streaming export Enterprise

12.6 Data retention

Tool	Finding
Privatrak	Free 30 days, Starter 90, Pro 180; Flows at most 90 days
GA4	Event- and user-level 2 or 14 months (explorations and funnels only); standard reports unaffected
Plausible	"No retention limit" (Starter)
Fathom	"Ongoing data retention" while subscribed; no period stated
Umami Cloud	Hobby 6 months, Pro 2 years, Business 5 years
Pirsch	Unlimited on all plans
Matomo Cloud	Raw data 24 months; reports kept indefinitely
Cloudflare WA	Unsampled 7 days, then about 10% aggregate; 6 months viewable
PostHog	Events: Free 1 year, paid 2 years. Replays: Free 30 days, paid 90
Mixpanel	Data default 2 years; replays 30 days
Amplitude	Free 1 year data access; Plus 2 years
Clarity	Recordings 30 days (favourites and a sample up to 9 months); heatmaps 9 months
Mouseflow	Free 1 month, Essential 3, Advanced 6, Premium 12
Sentry	Free 30-day lookback; Team up to 90 days
LogRocket	Not found in docs (set by plan; extended retention on Pro/Enterprise up to 12 months)

12.7 Sampling

Tool	Finding
Privatrak	Not found in docs
GA4	Explorations sample above 10M events per query; thresholds withhold rows and cannot be adjusted
Plausible	Not found in docs
Fathom	"We do not use probabilistic or approximate counting methods"
Umami Cloud	Not found in docs
Pirsch	Not found in docs
Matomo Cloud	"Matomo does not sample data"
Cloudflare WA	Dynamic sampling between 0.0001% and 100% per query
PostHog	Replay sample rate is configurable (100% recommended); insight sampling not found in docs
Mixpanel	Query-time sampling only on Enterprise above 2B events/mo; web replay default 0%
Amplitude	Opt-in query-time sampling (10% of users); replay sampleRate default 0
Clarity	Records up to 100k sessions/project/day; heatmaps use a sample, max 100k pageviews; FAQ claims "no sampling"
Mouseflow	Recording rate: Free/Essential 100%, Advanced 75%, Premium 50%; pauses at monthly cap
Sentry	Replay session sample rate (0.1 recommended default; 1.0 on error)
LogRocket	Records until the session quota; Conditional Recording add-on (Pro/Enterprise)

12.8 Free-plan limits

Tool	Finding
Privatrak	10k events/mo, 1 project, 1 member, 1 dashboard, 3 funnels, 2 API keys
GA4	No monthly event cap found; configuration limits (e.g. 50 event-scoped dimensions, 30 key events)
Plausible	No free plan (30-day trial)
Fathom	No free plan (7-day trial)
Umami Cloud	100K events/mo, 1 website, no team members
Pirsch	No free plan (30-day trial)
Matomo Cloud	No free plan (21-day trial)
Cloudflare WA	10 non-proxied sites (soft limit); proxied sites unlimited
PostHog	1M events, 5K recordings, 1M flag requests, 1 project, unlimited members
Mixpanel	1M events/mo, 10K replays, unlimited seats and saved reports
Amplitude	2M events, 10K replays/mo, unlimited seats
Clarity	No traffic limits; unlimited projects and members; 100k recorded sessions/day
Mouseflow	500 sessions/mo, 1 website, unlimited users
Sentry	5k errors, 50 replays, 5M spans, 1 user, 10 dashboards
LogRocket	1,000 sessions/mo

12.9 Cookie / consent stance (as the vendor states it)

Tool	Finding
Privatrak	No cookies, stores nothing on device; "in many countries you need no banner"
GA4	Uses cookies; Consent Mode (basic/advanced) sends cookieless pings when consent is denied
Plausible	No cookies; "you do not need cookie banners"
Fathom	No cookies; no consent banner needed
Umami Cloud	Tracker uses no cookies; GDPR "depends on how you configure" it
Pirsch	"We do not use cookies"; banner not covered
Matomo Cloud	Cookies can be disabled; banner-free only under conditions (e.g. CNIL); German JS tracking needs consent
Cloudflare WA	No cookies or localStorage, no fingerprinting; consent not addressed
PostHog	Cookies by default; `cookieless_mode: "always"` needs no banner
Mixpanel	Cookie/localStorage; customer responsible for consent; opt-out API
Amplitude	Browser SDK sets cookies on init; `identityStorage: none`; customer obtains consent
Clarity	First-party cookies; explicit consent required in EEA/UK/CH via the Consent API
Mouseflow	Cookies, or a "Disable Cookies" app that uses local/sessionStorage; consent still the customer's duty
Sentry	Not found in docs (docs only cover capturing cookie data)
LogRocket	`_lr_tabs_` and `_lr_hb_` cookies, which "cannot be disabled"; consent not covered

12.10 Where data is stored / EU option

Tool	Finding
Privatrak	"Servers in the EU" (country not named)
GA4	Google data centres, no region named; no EU-only option found
Plausible	EU, on infrastructure owned by European companies
Fathom	EU visitors processed in the EU, others in the US; "Extreme EU isolation" option
Umami Cloud	US or EU region, chosen at signup
Pirsch	Cloud in Germany
Matomo Cloud	Frankfurt, Germany
Cloudflare WA	Processed at the nearest data centre; option to exclude EEA/UK/CH visitors

Tool	Finding
PostHog	US (Virginia) or EU (Frankfurt)
Mixpanel	EU data residency available on Free and Growth
Amplitude	US or EU data centre (EU included on Free)
Clarity	Microsoft Azure; EU customers contract with Microsoft Ireland; region not named
Mouseflow	EU-based customers in the EU; Americas and Oceania in the US
Sentry	US (Iowa) or EU (Frankfurt), chosen when the organisation is created
LogRocket	SaaS hosted in the US; self-hosting on Enterprise

12.11 Bot filtering

Tool	Finding
Privatrak	Crawlers left out automatically and not billed; automated visits marked and filterable
GA4	Known bots excluded automatically; cannot be disabled; excluded volume not shown
Plausible	Automatic (UA, referrer spam, ~40,800 data-centre ranges, automation); Shields for custom rules
Fathom	Automatic (UA, data-centre IPs, missing UA); can be disabled; blocked count shown
Umami Cloud	Self-host docs: bots excluded by default; not stated for Cloud
Pirsch	Blocks most data-centre IPs and drops suspected bots; custom IP/path/country filters
Matomo Cloud	Bots excluded by default (Device Detector); custom UA exclusions; spam prevention
Cloudflare WA	"Exclude Bots" filter in reports; default not stated
PostHog	JS SDK blocks known bots (including Playwright etc.); "Is bot" filter; custom rules
Mixpanel	JS library drops 5 named crawlers by default; `$ignore` property for the rest
Amplitude	IAB/ABC bot list blocked by default for Browser SDK 1.10+; block filters
Clarity	Bot detection on by default; can be turned off; excluded count shown
Mouseflow	Optional Basic Bot Filtering (waits for an interaction); default not stated
Sentry	Inbound filter for errors from web crawlers; default not stated
LogRocket	Not found in docs

12.12 Server-side / log-based ingestion (crawlers, AI fetchers)

Tool	Finding
Privatrak	Server requests via WordPress, Cloudflare Worker, Next.js, Nuxt, Node or HTTP API; not billed
GA4	Measurement Protocol adds to tagging; it does not replace it
Plausible	Events API needs the visitor's UA and IP; data-centre IPs are dropped
Fathom	Not found in docs
Umami Cloud	`/api/send`, `/api/batch` and `@umami/node`; valid User-Agent required
Pirsch	Server-side hit API (visitor IP, URL, UA); suspected bots dropped
Matomo Cloud	Log Analytics importer works with Cloud; AI chatbots via CloudFront, Cloudflare, WordPress
Cloudflare WA	Edge collection for proxied sites (DNS change, no code)
PostHog	Server or CDN logs as `$http_log` events (Vercel source, Cloudflare Worker, capture API)
Mixpanel	HTTP API and SDKs; forward the raw UA so AI agents and bots are classified
Amplitude	HTTP and Batch API with a `user_agent` field for bot blocking
Clarity	Bot Activity from CDN logs (Cloudflare, Fastly, CloudFront, Akamai, Azure Front Door, WordPress)
Mouseflow	Not found in docs
Sentry	Server SDKs for errors only; crawler ingestion not found
LogRocket	Not found in docs (MCP Replay records MCP server requests only)

12.13 Where vendor pages disagree

- **Amplitude:** the pricing page says Free has no alerts and that exports are Growth/Enterprise only. The docs say alerts exist on all plans (Free gets 1) and that the Export API is on all plans.
- **Mouseflow:** the pricing page says Free and Essential have no data export or REST API. A help article describes CSV downloads without naming a plan.
- **PostHog:** the subscriptions page shows "Up to 5" next to a list of plans that includes Free, but does not say which plans the limit covers.

12.14 Sources

All opened 2026-11-20.

Privatrak

- https://privatrak.com/pricing
- https://privatrak.com/llms.txt
- https://privatrak.com/docs/plans
- https://privatrak.com/docs/custom-dashboards
- https://privatrak.com/docs/privacy
- https://privatrak.com/docs/members
- https://privatrak.com/docs/server-requests
- https://privatrak.com/docs/settings
- https://privatrak.com/docs/sessions
- https://privatrak.com/docs/events
- https://privatrak.com/docs/ai-services
- https://privatrak.com/docs/mcp-reference

Google Analytics 4

- https://support.google.com/analytics/answer/7667196
- https://support.google.com/analytics/answer/13331292
- https://support.google.com/analytics/answer/9888366
- https://support.google.com/analytics/answer/9383630
- https://support.google.com/analytics/answer/13722168
- https://support.google.com/analytics/answer/9317657
- https://support.google.com/analytics/answer/9443595
- https://support.google.com/analytics/answer/9358801
- https://support.google.com/analytics/answer/12229528
- https://support.google.com/analytics/answer/10000067
- https://support.google.com/analytics/answer/6004245
- https://developers.google.com/analytics/devguides/collection/protocol/ga4
- https://developers.google.com/analytics/devguides/reporting/data/v1/quotas

Plausible

- https://plausible.io/#pricing
- https://plausible.io/docs/shared-links
- https://plausible.io/docs/email-reports
- https://plausible.io/docs/traffic-spikes
- https://plausible.io/docs/export-stats
- https://plausible.io/docs/stats-api
- https://plausible.io/docs/events-api

- https://plausible.io/docs/users-roles
- https://plausible.io/docs/bot-traffic-filtering
- https://plausible.io/data-policy

Fathom

- https://usefathom.com/pricing
- https://usefathom.com/features
- https://usefathom.com/docs/features/shared-dashboards
- https://usefathom.com/docs/start/measurement
- https://usefathom.com/docs/features/bot-detection
- https://usefathom.com/docs/script/eu-isolation
- https://usefathom.com/docs/troubleshooting/cookies
- https://usefathom.com/data
- https://usefathom.com/api

Umami Cloud

- https://umami.is/pricing
- https://docs.umami.is/docs/cloud
- https://docs.umami.is/docs/cloud/faq
- https://docs.umami.is/docs/cloud/notifications
- https://docs.umami.is/docs/cloud/email-reports
- https://docs.umami.is/docs/cloud/export-data
- https://docs.umami.is/docs/enable-share-url
- https://docs.umami.is/docs/faq
- https://docs.umami.is/docs/environment-variables
- https://docs.umami.is/docs/guides/send-server-side-events

Pirsch

- https://pirsch.io/pricing (the comparison table was read from the raw HTML)
- https://docs.pirsch.io/
- https://docs.pirsch.io/advanced/access
- https://docs.pirsch.io/advanced/email-reports
- https://docs.pirsch.io/advanced/traffic-alerts
- https://docs.pirsch.io/advanced/traffic-spike
- https://docs.pirsch.io/advanced/traffic-filter
- https://docs.pirsch.io/get-started/export
- https://docs.pirsch.io/get-started/backend-integration
- https://docs.pirsch.io/privacy
- https://docs.pirsch.io/faq

Matomo Cloud

- https://matomo.org/pricing/
- https://matomo.org/start-free-analytics-trial/
- https://matomo.org/faq/general/configure-data-retention/
- https://matomo.org/faq/troubleshooting/faq_50/
- https://matomo.org/faq/new-to-piwik/faq_63/
- https://matomo.org/faq/how-to/faq_20130/
- https://matomo.org/faq/new-to-piwik/how-do-i-use-matomo-analytics-without-consent-or-cookie-banner/
- https://matomo.org/faq/general/can-i-use-log-analytics-with-matomo-cloud/

- https://matomo.org/faq/reports/what-are-ai-assistants-in-matomo/

Cloudflare Web Analytics

- https://developers.cloudflare.com/web-analytics/faq/
- https://developers.cloudflare.com/web-analytics/limits/
- https://developers.cloudflare.com/web-analytics/about/
- https://developers.cloudflare.com/web-analytics/data-metrics/data-origin-and-collection/
- https://developers.cloudflare.com/web-analytics/data-metrics/dimensions/
- https://developers.cloudflare.com/analytics/faq/about-analytics/
- https://developers.cloudflare.com/speed/observatory/rum-beacon/
- https://www.cloudflare.com/web-analytics/

PostHog

- https://posthog.com/pricing (raw HTML)
- https://posthog.com/pricing.md
- https://posthog.com/data-pipelines/pricing
- https://posthog.com/llms.txt
- https://posthog.com/docs/product-analytics/sharing
- https://posthog.com/docs/product-analytics/subscriptions
- https://posthog.com/docs/alerts
- https://posthog.com/docs/session-replay/recording-retention
- https://posthog.com/docs/session-replay/how-to-control-which-sessions-you-record
- https://posthog.com/docs/product-analytics/sampling
- https://posthog.com/docs/how-posthog-works/queries
- https://posthog.com/docs/api
- https://posthog.com/docs/privacy/data-collection
- https://posthog.com/tutorials/cookieless-tracking
- https://posthog.com/docs/web-analytics/managing-bot-traffic
- https://posthog.com/docs/web-analytics/bot-detection

Mixpanel

- https://mixpanel.com/pricing/
- https://docs.mixpanel.com/docs/pricing
- https://docs.mixpanel.com/docs/boards
- https://docs.mixpanel.com/docs/boards/public-boards
- https://docs.mixpanel.com/docs/features/alerts
- https://docs.mixpanel.com/docs/export-methods
- https://docs.mixpanel.com/docs/reports
- https://docs.mixpanel.com/docs/tracking-best-practices/bot-traffic
- https://docs.mixpanel.com/docs/tracking-best-practices/server-side-best-practices
- https://docs.mixpanel.com/docs/privacy/protecting-user-data

Amplitude

- https://amplitude.com/pricing
- https://amplitude.com/docs/analytics/share-external
- https://amplitude.com/docs/analytics/dashboard-subscribe
- https://amplitude.com/docs/analytics/insights
- https://amplitude.com/docs/analytics/charts/optimize-query-performance
- https://amplitude.com/docs/apis/analytics/export

- https://amplitude.com/docs/data/destination-catalog/amazon-s3
- https://amplitude.com/docs/data/block-bot-traffic
- https://amplitude.com/docs/data/privacy-and-consent-implementation

Microsoft Clarity

- https://learn.microsoft.com/en-us/clarity/faq
- https://learn.microsoft.com/en-us/clarity/setup-and-installation/clarity-setup
- https://learn.microsoft.com/en-us/clarity/setup-and-installation/clarity-data-export-api
- https://learn.microsoft.com/en-us/clarity/setup-and-installation/clarity-downloads
- https://learn.microsoft.com/en-us/clarity/ai-visibility/bot-activity-overview

Mouseflow

- https://mouseflow.com/pricing/
- https://mouseflow.com/legal/gdpr/
- https://mouseflow.com/legal/subprocessors/
- https://help.mouseflow.com/en/articles/4271081-basic-bot-filtering
- https://help.mouseflow.com/en/articles/4277755-recording-controls
- https://help.mouseflow.com/en/articles/4270325-how-can-i-export-mouseflow-data
- https://help.mouseflow.com/en/articles/4277814-setting-a-monthly-recording-limit
- https://help.mouseflow.com/en/articles/4397887-how-long-is-data-stored
- https://help.mouseflow.com/en/articles/9112429-session-replay-recorded-sessions-and-live-sessions
- https://help.mouseflow.com/en/articles/5167255-disable-cookies

Sentry

- https://sentry.io/pricing/
- https://docs.sentry.io/organization/data-storage-location/
- https://docs.sentry.io/concepts/data-management/filtering/
- https://docs.sentry.io/platforms/javascript/data-management/data-collected/
- https://docs.sentry.io/product/explore/discover-queries/query-builder/
- https://docs.sentry.io/product/issues/issue-details/
- https://docs.sentry.io/product/notifications/
- The replay sample rates (0.1, and 1.0 on error) are from a search summary of https://docs.sentry.io/platforms/javascript/session-replay/. I did not open that page, so this one figure is unverified.

LogRocket

- https://logrocket.com/pricing (also raw HTML)
- https://docs.logrocket.com/llms.txt
- https://docs.logrocket.com/docs/q-a
- https://docs.logrocket.com/docs/your-plans-page
- https://docs.logrocket.com/reference/cookies
- https://docs.logrocket.com/docs/dashboards
- https://docs.logrocket.com/docs/metrics-alerting

13. Tool profiles

Each profile has the same parts:

- **Delivered:** what the tool received on 17-18 Nov.
- **All days, AI and apps:** what chapters 10 and 11 added.
- **Dashboard** and **MCP:** what each test showed.
- **Strengths** and **gaps**, as the lab saw them. A strength is a measured result where the tool did better than most or saved effort; a gap is what cost an answer or could mislead a reader. The same rules apply to every tool; deliberate choices are under **By design**.

Steps count the setup screens from chapter 6.

13.1 Privatrak (ours)

- **Type:** cookieless product analytics. Visitors are a daily-key hash of IP and user agent; no geodata.
- **Plan:** ours. Setup takes 2 steps to the snippet since 15 Nov (6 when the lab was set up on 14 Nov; chapter 6).
- **Delivered:** 102 visits, 71 person-days, 199 page views. It was the most complete delivery of any tool, and its script is on no block list yet.
- **Dashboard:** 7 ✓, mean findability 4.3.
  - Visitors, sources, the funnel, features (downloads, outbound, purchases) and click problems are all on the Overview, or one click away.
- **MCP:** official, hosted, OAuth.
  - 7 ✓, 18 calls with none failed, 57 s.
  - Same numbers with Sonnet and Opus (as Plausible, Pirsch, Matomo and Cloudflare).
  - Setup worked, inside a setup run with undo (dry run, then all 4 objects removed).
  - Its round-2 report named the two broken controls with every number found, missed the 404, and reported a TypeError that is likely its own false positive. It stored the report as an AI review.
  - It has the second-largest tool context (~60,000 tokens).
- **All days, AI and apps (chapters 10, 11):** no recognition across days (daily key, as documented); the AI assistants report named ChatGPT (2) and Claude (1) fetches from the server-side feed and kept Gemini's `Google` unattributed; automated page-weight runs stored and marked. It recorded the Claude in Chrome agent unflagged (the first run went through our own browser, which blocks Privatrak; the re-run without that block): its agent-pointer rule needs two clicks on one page, the agent clicked once per page. Stored nothing in the browser.
- **Strengths:**
  - The most complete delivery: 102 of 104 visits (its script was on no block list yet).
  - Visitors and page views exact: 72 and 200, checked event by event against the records (chapter 5).
  - The only answer with both rage and dead click counts exact ("Duplicate form" 7 / 4, named by text).
  - Most answers on one screen, the Overview.
  - Automated visits kept and marked rather than dropped.
  - Through MCP: 7 ✓ with no failed call, the same numbers with two models, and revenue right (one of four servers).
  - Setup through MCP with undo, the only server that can undo.
  - Names AI assistants' fetches from a server-side feed (one of three tools).
  - Nothing stored in the visitor's browser.
- **Gaps:**
  - Revenue only through an Insights sum, without a currency.
  - Nothing marks a 404, and its MCP report missed the broken link.

    - Error clicks may include other scripts' cancelled requests: its "Place order" error clicks are likely false positives (14.2, item 10).
    - Its agent rule misses an agent that clicks once per page.
    - Its MCP server has no crawler or link-preview view.
- **By design:** no location data, so no country reports; visitors are not recognised across days (a daily key); time on page is active time (visible tab, recent input).

13.2 Plausible

- **Type:** cookieless web analytics, daily salt.
- **Plan:** 30-day trial (Business features). Setup took 1 step.
- **Delivered:** 39 visits, 26 person-days. It **dropped every Playwright-Chromium visit** (202 + `x-plausible-dropped`); a real Chrome was kept.
- **Dashboard:** 8 ✓, mean findability 4.7.
    - One page of tabbed boxes; goals for downloads, outbound clicks, forms and 404 are created automatically.
    - Revenue (€24) and an ordered funnel are shown plainly.
- **MCP:** community server by Sentry, Stats API key.
    - 7 ✓, 43 s, the fastest.
    - No funnels, no goal list, no writes.
    - Every revenue call failed on the server's output schema.
- **All days, AI and apps:** page views exact on every r4 day once real browsers are counted; a range's visitors are the sum of its days. Dropped every server-side crawler page view (202, `x-plausible-dropped`) and the webdriver page-weight runs; merged three phone visits within 3 minutes into one visit and lost the ChatGPT app's `utm_source`.
- **Strengths:**
    - Page views exact or within one on every day, for the visits it kept.
    - Most answers on the first screen (findability 4.7); revenue (€24) and an ordered funnel shown plainly.
    - Downloads, outbound clicks, form submissions and 404s detected without setup.
    - The fastest MCP answers (43 s).
    - The smallest script (3 KB), and nothing stored in the browser.
    - Time on page close to the wall-clock time (66 s against 79 s).
- **Gaps:**
    - Silent dropping of automated browsers and many VPN and data-centre visits: the dashboard and API never say what was discarded.
    - The MCP server is unofficial and cannot do revenue.
    - Three phone visits within 3 minutes merged into one, losing the ChatGPT app's `utm_source`.
    - Its round-2 report read the smaller day 2 as "engagement collapsed".
- **By design:** visitors are not recognised across days (a daily salt); no click problems or replays.

13.3 Pirsch

- **Type:** cookieless web analytics.
- **Plan:** 30-day trial. Setup took 2 steps.
- **Delivered:** 99 visits, 68 person-days.
- **Dashboard:** 6 ✓, findability 4.3.
    - Referrers, countries and events are all on the dashboard.
    - Downloads, outbound clicks and 404s arrive on their own.
    - The UI funnel works (23 → 4 → 4).

- **MCP:** community server, OAuth client.
  - 6 ✓, the smallest context (~2,000 tokens).
  - Takes `timezone=UTC`.
- **All days, AI and apps:** 20 Nov exact; no recognition across days; nothing from the server-side crawler feed appears. Read the ChatGPT app's `utm_source` as referrer chatgpt.com; kept a URL fragment (`#st-picker`) as a page.
- **Strengths:**
  - 20 Nov exact.
  - Downloads, outbound clicks and 404s arrive on their own.
  - The smallest MCP context (~2,000 tokens), and UTC days through `timezone=UTC`.
  - Revenue through MCP (one of four servers, without a currency).
  - A 4 KB script, and nothing stored in the browser.
- **Gaps:**
  - The UI shows only the domain's zone, so UTC days are impossible. The timezone select is misleading.
  - Time on page is badly inflated: 18 min 16 s on `/article`, and the same in the API.
  - Revenue only as metadata.
  - The server's `funnels` metric fails.
  - "Google" and "google" appear as separate rows, and a URL fragment was kept as a page.
- **By design:** visitors are not recognised across days (the date is part of the hash).

13.4 Umami Cloud

- **Type:** cookieless web analytics; monthly salt by default.
- **Plan:** free (Hobby). Setup took 1 step.
- **Delivered:** 83 visits, 66 person-days. It was missing 13 of the first 15 visits of 17 Nov, during its own HTTP 500 outage.
- **Dashboard:** 6 ✓, findability 4.3.
  - Sources were exact.
  - Funnels Contact (22 → 3 → 3) and Checkout.
  - Revenue €56 exact, with per-referrer and per-country revenue.
- **MCP:** official since September 2026, but only from Pro; not tested.
- **All days, AI and apps:** 20 Nov exact; merged the phone's three visits into one session; answered every server-side crawler post `beep boop` (bot) and showed none; UTM source chatgpt.com kept.
- **Strengths:**
  - 20 Nov exact, and exact sources.
  - Revenue €56 exact, with revenue per referrer and per country.
  - Funnels that work (Contact 22 → 3 → 3).
  - An 8 KB script, and nothing stored in the browser.
- **Gaps:**
  - The start page and settings show a login form even when you are signed in.
  - The URL holds the browser's midnights, so an edited URL is off by the browser's offset.
  - Revenue opens in USD as "$0.00".
  - "Visit duration" 0 s stands in for time on page.
- **By design:** a monthly salt by default; on the free plan no downloads, outbound clicks, 404 marking or click problems.

13.5 Fathom

- **Type:** cookieless web analytics, daily salt at midnight UTC.
- **Plan:** trial. Setup took 1 step.
- **Delivered:** 99 visits, 68 person-days.
- **Dashboard:** 3 ✓, findability 4.8 over the five questions it could answer.
  - Everything on one page: visitors, referrers, countries, events, revenue (€56 exact) and the 404 event.
- **MCP:** only a community server with three tools (account, sites, current visitors), which cannot answer analytics questions.
- **All days, AI and apps:** visitors exact on every day once the extras count; places NordVPN's PacketHub exits in Brazil; dropped `utm_source` from the page and showed it nowhere; no server-side path.
- **Strengths:**
  - The highest findability (4.8) where it answers.
  - Visitors exact on every day once the extras count; revenue and 404 exact.
  - A 5 KB script, and nothing stored in the browser.
- **Gaps:**
  - 20 page views short on 17-18 Nov (unexplained).
  - Brazil 20 for visits from VPN, data-centre and some residential exits.
  - UTM campaigns not shown.
  - The 7-day view lagged behind "Today".
- **By design:** no time on page and no funnels; downloads, outbound clicks and 404s only as events the site sends; visitors are not recognised across days (a daily salt).

13.6 Google Analytics 4

- **Type:** web analytics, cookies.
- **Plan:** free. Setup took 7 steps, with pre-ticked data-sharing options and a GDPR DPA checkbox.
- **Delivered:** 92 visits; two proxy exits could not load gtag.js.
- **Dashboard:** all ≈, because the property was on Los Angeles time and no report can show UTC days. Against its own window the numbers are close.
  - Funnels exist only as explorations, about 30 clicks to build.
  - Revenue is converted to USD silently ($26.44 for €24).
  - Two user counts on neighbouring screens.
- **MCP:** official, local. 11 setup steps and about 25 minutes, including a blocked sign-in and an API the guide doesn't name.
  - Round 1 answered in the property's days.
  - Opus rebuilt UTC days from `dateHour`: 49 users, 179 page views.
  - Write tools need `--allow-write`.
- **All days, AI and apps:** read per window on its Los Angeles days; recognises returning users. Counted the AI fetches sent through the Measurement Protocol as ordinary users (ChatGPT's as a "smart tv"), the ChatGPT app's visit under its "AI Assistant" channel, the agent as a returning user, and the webdriver page-weight runs as 2 new users.
- **Strengths:**
  - Downloads and outbound clicks captured by default.
  - Recognises returning users.
  - Its typed report tool let the Opus run rebuild exact UTC days.
- **Gaps:**
  - The timezone trap: days follow the property's zone and cannot be read in UTC.

    - Numbers for a finished day change a day later.
    - Revenue converted to USD silently.
    - Two user counts on neighbouring screens; time per user, not per view.
    - Heavy setup, both for the tool and for MCP.
- **By design:** cookies and consent; no rage or dead clicks.

13.7 Matomo Cloud

- **Type:** web analytics, cookies (`_pk_id`, 13 months).
- **Plan:** 21-day trial. Setup took 3+ steps; dense admin.
- **Delivered:** 78 visits. **It counted 49.**
- **Dashboard:** mostly ≈ (1 ✓), findability 4.2.
    - Channels including AI Assistants, ecommerce, goals and funnels are all there.
    - Unique visitors are not offered for a date range.
- **MCP:** official, hosted, off by default (superuser setting plus an auth token).
    - Numbers identical to the UI.
    - Setup only through the raw `Goals.addGoal` call.
    - The API cannot add widgets to a dashboard.
- **All days, AI and apps:** recognised every returning persona on 19 and 20 Nov exactly. Its 49 of 78 comes from the 30-minute visit merge and from dropping NordVPN visits (11 of 13, and the VPN visits on 20 Nov). The AI Chatbots report named the ChatGPT (2) and Claude (1) fetches from the server-side feed; day reports lagged.
- **Strengths:**
    - Recognised every returning visitor on the last two days, exactly.
    - Its AI Chatbots report named the ChatGPT and Claude fetches.
    - The fullest classic web-analytics feature set (ecommerce, goals, heatmaps, recordings).
    - Identical numbers in UI and API, and with two models.
- **Gaps:**
    - The undercount: visits from most VPN exits silently dropped (the setting behind it not identified).
    - Time on page 235 s.
    - Direct is no row through the API.
- **By design:** cookies and consent; a 30-minute visit; query strings kept as separate pages by default.

13.8 PostHog

- **Type:** product analytics, cookie plus local storage.
- **Plan:** free. Setup took 4 steps, with heatmaps, dead clicks and replay on three different settings pages.
- **Delivered:** 66 visits (consent-gated).
- **Dashboard:** 6 ✓, findability 3.3.
    - Web analytics is a real overview, but its headline tiles (39 visitors, 76 page views) disagree with its own tables (41, 106).
    - Time on page, PDF clicks and revenue only through trends insights.
- **MCP:** official, hosted.
    - One `exec` gateway to ~640 sub-commands, with HogQL.
    - 7 ✓; answered everything, mostly in SQL.
    - Setup worked (insight, action, dashboard), with no undo. Its write tools include deleting persons and changing project settings.
    - Its round-2 report found all three site defects and its own measurement gaps.

- **All days, AI and apps:** recorded none of the app page's `pushState` routes; its script mostly stops on webdriver. From `$http_log` it classified ChatGPT-User and Claude-User as AI agents, WhatsApp as a social crawler, Apple's preview as "Facebook", and Gemini's `Google` as a regular visitor. Gave the ChatGPT app visit channel "AI".
- **Strengths:**
  - Answered all ten questions through MCP.
  - Classified AI fetchers from server logs (`$http_log`).
  - Its MCP report found all three site defects.
  - Real funnels, and SQL over everything.
  - Gave the ChatGPT app's visit the channel "AI".
- **Gaps:**
  - Contradictory numbers on one screen.
  - No `pushState` routes recorded with the default setup.
  - Property names must be known (`revenue`, not `total`).
  - The base currency defaults to USD.
- **By design:** cookies and consent; its script mostly stops on `navigator.webdriver`.

13.9 Mixpanel

- **Type:** product analytics, cookies.
- **Plan:** free. Setup took 2 steps; EU residency needs `api_host` set in the code.
- **Delivered:** 69 visits (consent-gated).
- **Dashboard:** 6 ✓, findability 3.1.
  - No traffic overview: every answer is an Insights report (6-10 clicks).
  - The home page claims no users or events.
  - Dead clicks only by element ID (`b`).
- **MCP:** official, hosted, EU URL.
  - 7 ✓ but slow (6.6 minutes): hand-built report JSON.
  - The largest tool context (~64,000 tokens).
  - Setup only onto a board. Mixpanel has no goal object, and saving a cohort was refused on the free plan.
- **All days, AI and apps:** honours Do Not Track (dropped the DNT agent visit and the DNT+GPC personas); counted every server-side crawler page view as a user's page view without a bot label; channel "Other Advertising" for `utm_source=chatgpt.com`.
- **Strengths:**
  - Exact counts once the report is built; revenue correct in the dashboard and through MCP.
  - 7 ✓ through MCP.
  - Rage and dead clicks per element (by id).
- **Gaps:**
  - No source property: the site itself is the top referrer.
  - The home page claims no users or events while data arrives.
  - Saved query definitions can't be read back through MCP.
- **By design:** cookies and consent; honours Do Not Track; no time on page.

13.10 Amplitude

- **Type:** product analytics.
- **Plan:** free Starter. Setup took 1 step, with a live-configuring snippet.
- **Delivered:** 82 visits (consent-gated; 13 decliners' requests cancelled).

- **Dashboard:** 2 ✓, findability 2.6, the lowest.
  - A ready Marketing Analytics web dashboard exists, but sources, countries and clicks need new charts.
  - Charts have no total column.
  - Time Spent Per Page 18 min 45 s.
  - Dead clicks by text, no rage event.
  - Revenue correct after a property default that gives 0.
- **MCP:** only on Enterprise or the Plus add-on; not tested.
- **All days, AI and apps:** recognises visitors across days (42 for 41 personas); ingested every server-side crawler page view without a label; opted out on the stored consent decline.
- **Strengths:**
  - Recognised visitors across days (42 for 41 personas).
  - Dead clicks named by element text.
  - A snippet that configures itself live.
- **Gaps:**
  - Inflated time on page (18 min 45 s).
  - Charts have no total column.
  - Answers are charts to build (findability 2.6).
- **By design:** cookies and consent.

13.11 Microsoft Clarity

- **Type:** session replay and heatmaps.
- **Plan:** free. Setup took 1 step; smart events are detected automatically.
- **Delivered:** 84 visits.
- **Dashboard:** all ≈ or ✗, findability 3.6.
  - 112 sessions for 84 visits, with 46 bot sessions excluded.
  - France 25 against 14.
  - The site itself is the top referrer.
  - Time only per session.
  - The heatmap ranks text and a chart as dead clicks but not the real dead button.
- **MCP:** official, local; sign-in in the browser (twice); last 1-3 days only; 10 calls a day. It answered in round 2: 112 sessions, France 29.
- **All days, AI and apps:** recognises almost nobody (148 users for 40 personas): its cookie waits for consent; without consent it cuts every page into separate sessions, each listed twice. Honours GPC, not DNT alone. Its Bot Activity (a CDN's logs) was not connected: Cloudflare was read directly.
- **Strengths:**
  - Free replays and heatmaps with no traffic limit.
  - Smart events without setup (Outbound click, Purchase).
- **Gaps:**
  - Inflated sessions and France.
  - No page-view total.
  - Dead-click detection misses the real dead button and flags text instead.
  - A tight MCP window (last 1-3 days, 10 calls a day).
- **By design:** a replay and heatmap tool: time only per session; its cookie waits for consent.

13.12 Mouseflow

- **Type:** session replay and heatmaps.
- **Plan:** free, 500 sessions. Setup took 2 steps, but it records nothing until "Activate Tracking", and it started a Premium trial unasked.
- **Delivered:** 82 visits; it records 55 sessions, and nothing from headless Chromium.
- **Dashboard:** findability 3.9.
  - Counts only recorded sessions.
  - No source report found.
  - France read off a bar chart with no numbers.
  - Contact funnel 0.
  - Purchases only as tags on 2 sessions, no amount.
  - Times are in UTC.
- **MCP:** Premium only; not tested.
- **All days, AI and apps:** recognises visitors across days; records nothing for webdriver browsers; sessions sat under Live Sessions for 40+ minutes before moving to Recorded; tagged the ChatGPT app visit `utm_source=chatgpt.com`.
- **Strengths:**
  - Recognised visitors across days.
  - Live sessions, and UTM values as tags.
- **Gaps:**
  - No downloads or outbound clicks outside the heatmap viewer, and no purchase amounts.
  - France only as a bar chart without numbers; no source report found.
  - Sessions waited 40+ minutes under Live Sessions before reaching Recorded.
- **By design:** it records a sample (500 sessions a month on the free plan) and nothing from `navigator.webdriver` browsers.

13.13 Sentry

- **Type:** error monitoring with session replay.
- **Plan:** Developer, 50 replays a month. Setup took 5 steps.
- **Dashboard:** only Q8. "Most Dead Clicks: button#b 3" is a ready widget; no rage clicks.
- **MCP:** official, hosted, OAuth.
  - It failed to connect in the parallel round 1, then worked alone.
  - Relative periods only.
  - Opus counted replays by hand (France 13, `/templates` 3).
  - Its report used the `#r=` run labels to spot test traffic.
- **All days, AI and apps:** replays only; stopped on the stored consent decline; places NordVPN's PacketHub exits in Brazil.
- **Strengths:**
  - Found the "Save draft" error and the failing Mouseflow script.
  - A ready dead-click widget (`button#b`).
  - Its MCP report found all three site defects.
- **Gaps:**
  - Labels replays by full IP address.
  - Relative periods only through MCP.
- **By design:** an error tracker with replays, no analytics.

13.14 LogRocket

- **Type:** session replay.
- **Plan:** free, 1,000 sessions. Setup took 1 step.
- **Delivered:** 97 visits.
- **Dashboard:** 5 ✓, findability 2.9.
  - The session list with filters is the analytics tool. It was exact: 97 sessions, France 18, LinkedIn 11, purchases 7.
  - Dashboards show only the last day of a range, with no totals.
  - Rage clicks: "No sessions found".
- **MCP:** official, hosted.
  - Natural-language `build_metric` moved the period into 19 Nov in five of ten answers (Sonnet), and answered two questions with a question back.
  - Opus kept the period.
  - Very large answers: 15,000-26,000 characters on average.
- **All days, AI and apps:** recorded every JavaScript visit, consent declines included (it has no consent call), and labels sessions with the full IP address; no bot or source fields.
- **Strengths:**
  - Session count exact (97 for 97), with France and purchases exact.
  - Dead clicks on "Duplicate form" exact (7 sessions).
  - Its MCP report found all three site defects, with every number found in its tool results.
- **Gaps:**
  - Dashboards show only the last day of a range, with no totals.
  - The Sonnet MCP run moved the period in five of ten answers.
  - Labels one session by full IP address.
  - Its report called the PDF link broken.
- **By design:** session replay; no consent call, so it records consent declines too.

13.15 Cloudflare Web Analytics

- **Type:** cookieless page-load analytics; visits only.
- **Plan:** free. Setup took 4 steps.
- **Delivered:** 95 visits.
- **Dashboard:** 4 ✓.
  - Visits (95, exact), page views, referrers, countries and paths.
  - No events, time on page or funnels.
  - The site's name in the site list links to the site itself; that is how the stray visit happened.
- **MCP:** the generic Cloudflare API server.
  - The assistant writes JavaScript and GraphQL; introspection failed and field names were guessed.
  - It could change any resource the token allows, with no read-only mode.
- **All days, AI and apps:** with the site behind Cloudflare, the edge labelled ChatGPT-User "AI Assistant" and OAI-SearchBot "Search Engine Crawler", nothing else; AI Crawl Control's chart showed ChatGPT-User 2 and Claude-User 1 while its totals said 0. Web Analytics counted the webdriver page-weight runs as 6 visits for 6 page loads.
- **Strengths:**
  - Visits exact (95 for 95), free and with no setup.
  - At the edge, it labelled ChatGPT-User as an AI assistant.
- **Gaps:**
  - Its MCP report recommended speeding up pages measured at 12-14 s through residential proxies.

    - AI Crawl Control's totals said 0 while its chart showed the AI fetches.
- **By design:** page loads and visits only: no events, time on page or funnels.

14. Limits and open questions

14.1 Limitations

- **Scripted visitors, not real ones.** Every r4 visit was driven by Playwright with person-like input. The four manual visits are the only real browsers. Plausible's handling shows that a tool can treat an automation build differently from the real browser, so absolute counts for Plausible say more about Playwright's Chromium than about Chrome users.
- **Small numbers.** 104 visits over two days is enough to see systematic differences: missing reports, wrong units, inflated times, timezone shifts. It is too few to estimate a tool's error rate.
- **Residential IPs did not stick across days.** Next-day returns therefore test only browser-held identity (cookies, storage), never IP+UA hashing. The daily-salt test rests on three personas of the midnight pair.
- **Proxy artefacts.** Exits failed to reach single tool hosts (GA4 twice), changed mid-visit (two visits), or cut WebKit's leave-time sends. All are recorded in chapter 4 and excluded from expected numbers where they prevented delivery. None were re-run, because a re-run would double-count in every other tool.
- **Upper bounds for consent-gated tools.** A 2xx from a tool after an opt-out can be a configuration request, so their expected numbers are upper bounds.
- **Two tools off UTC.** GA4 and Pirsch could not be read in UTC days in their dashboards. GA4 is compared on its own window.
- **Findability is one assessor's judgement**, applied the same way to every tool; the answers are quoted so readers can judge for themselves.
- **MCP:**
  - One run per model and task.
  - One client only (Claude Code). claude.ai, the desktop app, Cursor and Codex sign in differently.
  - Report quality was judged by us only.
  - Three tools (Umami, Amplitude, Mouseflow) were not testable on our plans, and Fathom has no usable server.
- **AI and app rounds: one of each.** One ChatGPT, one Claude, one Gemini fetch, one agent visit, three app links from one phone on Wi-Fi. They show what each tool does with such a request, not how often assistants fetch.
- **The agent and page-weight visits on 20 Nov came through a VPN** (German exit). That exposed Matomo's VPN drops and Fathom's and Sentry's Brazil placement, and it means the agent visit is also a VPN visit.
- **Privatrak is ours.** Section 3.12 lists the safeguards and their limits.

14.2 Questions answered along the way

The two-day tests left eleven questions open. Reading every day and running the later rounds answered most of them.

1. **Matomo's 49 of 78:** the 30-minute visit merge (78 → 59) and NordVPN visits Matomo drops (11 of 13), above. One residential visit is left.
2. **No `/contact` → `/thanks` in PostHog, Clarity, Mouseflow, Amplitude:** of the four 17-18 Nov visits that reached `/thanks`, three declined the consent banner and the fourth was a marked (webdriver) WebKit visit, so the consent-gated tools rightly hold almost nothing of the step. Clarity keeps declined visits but, without its cookie, cuts every page into its own session (seen live on 20 Nov), so a funnel inside a session cannot form.
3. **Inflated time on page (Pirsch 18 min 16 s, Amplitude 18 min 45 s):** consistent with "time to the same visitor's next page view, across visits". Over the `/article` views of 17-18 Nov that each tool received and that had a later page view by the same persona on the same day, the mean gap is 15.2 min (Pirsch's visits) and 18.1 min (Amplitude's); within a visit no `/article` view was followed by another page. Not proven per view, since neither tool exports per-view times on our plans.
4. **Fathom's Brazil:** Fathom (and Sentry) place NordVPN's PacketHub addresses in Brazil: on 20 Nov exactly the visits through that VPN's German exit (Cloudflare: DE) are Fathom's Brazil, and residential exits add more on other days.
5. **Fathom's 174 page views for 194 delivered:** still open (the shortfall is on the burst days; 20 Nov is exact).

6. **Plausible's 31 visitors for 26 person-days:** visitors split by IP changes (the phone, p19); page views are exact.
7. **Firefox cross-site leave:** tested locally (a throwaway server on `localhost` → `127.0.0.1`, no visit to the site): Firefox, also with strict tracking protection, delivers `sendBeacon`, `fetch(keepalive)` and an image request from `pagehide` on a cross-site same-tab navigation; **WebKit delivers none of the three** (and all three on a same-site navigation); Chromium all. So p13's lost leave is not Firefox's navigation behaviour; the proxied, strict context (`NS_BINDING_ABORTED`) remains the likely cause.
8. **Marked and agent-like visits:** answered per tool (section 10.11).
9. **DNT and GPC:** in the series Mixpanel and Clarity sent nothing for the three personas that send both. On 20 Nov the agent's Chrome sent DNT alone: Mixpanel dropped it, Clarity recorded it. So Mixpanel honours DNT; Clarity reacts to GPC (or the pair), not to DNT alone.
10. **The TypeError after "Place order":** Privatrak recorded 4 error clicks on it (15, 16 ×2, 17 Nov), each at the time of a WebKit, Firefox or marked-Chromium buyer visit. The page's own code throws nothing: the checkout page served locally with every tool's script loaded and its data requests blocked raised no error after the click in WebKit, Firefox or Chromium. Privatrak counts an unhandled promise rejection from any script after a click, and the click navigates away after 300 ms, which cancels the tools' in-flight requests (WebKit rejects those as `TypeError: Load failed`); a tool's rejected request is the likely source. Not confirmed; Privatrak stores the error type only.
11. **AI fetchers, agents, apps, heatmaps:** run on 20 Nov (chapter 11, and the heatmap viewers in chapter 10).

14.3 Still open

1. **Fathom's 174 page views for 194 delivered** on 17-18 Nov (20 Nov is exact). Fathom's per-page counts for the burst hours against the visit records would show which views it leaves out.
2. **Matomo's VPN drops:** which setting or list makes Matomo Cloud discard these visits, and why one residential visit (`r4-d2-p07-alt-ip`) is missing too. The system settings are not readable with our access.
3. **The source of the "Place order" TypeError**, by recording one WebKit purchase with the tools' requests live.

14.4 Data and reproducibility

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File	What it holds
`visits.jsonl`	every visit of series r2, r3 and r4 and the check visits: persona, day, network kind, engine, mode, consent, source, pages with times, what the visit did, and every tool's request outcomes; IP networks replaced by pseudonyms (`network_id`)
`expected-all.json`, `truth-*.json`	the expected numbers per tool and window
`server-side-sends.jsonl`	every server-side request to a tool on 20 Nov, with the answer and the tool's verdict; no addresses
`page-weight.json`	requests, bytes, cookies and storage per tool for the page-weight runs
`persona-country.json`	the country of each persona
`matomo-match.txt`	the match of Matomo's visitor log against the visits it was sent
`unrecorded.json`	page loads on the site that are not in `visits.jsonl` (a new tab the runner does not record, our own visits, an unknown visitor, the manual, AI and app rounds), with the page views Privatrak stored of each where known

Not published: the web server's access logs, the manual and phone rounds' raw records (they hold real people's addresses), and the tools' account data. The appendices quote every dashboard and MCP answer verbatim, with IP addresses removed.

Appendix A: Visit log, series r4 (all 122 scripted visits)

One row per visit, in start order. Times are UTC. Exit IP addresses are kept only truncated in the raw manifest and are left out here.

Columns: **Net** residential (res), VPN, data-centre (dc). **Eng** Chromium (Cr), WebKit (WK), Firefox (FF). **Mode** person-like (human), agent-like (agent), automation markers left on (marked). **Consent** what the visit did with the banner. **Pages** in order. **Outcome** what the visit did that a tool could count.

#	Visit	Start (UTC)	s	Net	Eng	Mode	Consent	Source	Kind	Pages	Outcome	Traits
1	d1-p01-product	11/17 05:08	55	res	Cr	human	accept	producthunt	product	/product → /product?id=quote → /product?id=booking		
2	d1-p02-product	11/17 05:08	40	res	Cr	human	accept	producthunt	product	/product → /product?id=quote → /product?id=booking		
3	d1-p03-reader	11/17 05:09	99	res	Cr	agent	ignore	duckduckgo	reader	/article	read 57%	
4	d1-p05-reader	11/17 05:09	110	res	WK	human	decline	newsletter	reader	/article	read 89%	DNT/GPC
5	d1-p06-contact	11/17 05:11	63	res	WK	marked	ignore	producthunt	contact	/ → /pricing → /contact → /thanks	form sent	
6	d1-p07-downloader	11/17 05:12	49	res	Cr	human	ignore	duckduckgo	downloader	/article	PDF same-tab	
7	d1-p08-outbound	11/17 05:12	103	res	WK	human	decline	direct	outbound	/article	outbound same-tab	
8	d1-p09-lost	11/17 05:13	59	res	FF	agent	ignore	perplexity	lost	/product → /templates	404	
9	d1-p10-browser	11/17 05:14	62	res	Cr	human	ignore	hackernews	browser	/ → /product → /pricing		uBlock Lite
10	d1-p11-reader	11/17 05:14	74	res	FF	human	accept	perplexity	reader	/article	read 62%	DNT/GPC
11	d1-p12-browser	11/17 05:15	92	res	Cr	marked	ignore	google	browser	/ → /product → /pricing		
12	d1-p13-bounce	11/17 05:16	36	res	FF	human	accept	linkedin	bounce	/		FF strict
13	d1-p14-app	11/17 05:17	47	res	FF	human	decline	reddit	app	/app → /app/answers → /app/settings → /app/answers → /app/forms		
14	d1-p15-bounce	11/17 05:17	32	res	Cr	agent	ignore	google	bounce	/		
15	d1-p16-browser	11/17 05:18	61	res	Cr	human	decline	newsletter	browser	/ → /product → /pricing		
16	d1-p17-bounce	11/17 05:18	37	res	Cr	human	ignore	linkedin	bounce	/		DNT/GPC
17	d1-p18-searcher	11/17 05:19	67	res	Cr	marked	ignore	linkedin	searcher	/ → /search?q=quote	search	
18	d1-p19-contact	11/17 05:19	44	res	WK	human	decline	direct	contact	/ → /pricing → /contact → /thanks	form sent	
19	d1-p20-lost	11/17 05:20	45	res	WK	human	accept	hackernews	lost	/product → /templates → /	404	
20	d1-p21-bounce	11/17 05:20	21	res	FF	agent	ignore	hackernews	bounce	/		
21	d1-p22-app	11/17 05:21	42	res	WK	human	decline	chatgpt	app	/app → /app/answers → /app/settings → /app/answers → /app/forms		

#	Visit	Start (UTC)	s	Net	Eng	Mode	Consent	Source	Kind	Pages	Outcome	Traits
22	d1-p23-outbound	11/17 05:21	48	res	Cr	human	accept	bing	outbound	/article	outbound same-tab	uBlock Lite
23	d1-p24-reader	11/17 05:22	55	res	Cr	marked	ignore	hackernews	reader	/article	read 73%	
24	d1-p25-searcher	11/17 05:22	75	res	WK	human	ignore	producthunt	searcher	/ → /search?q=payments	search	
25	d1-p26-bounce	11/17 05:23	56	res	FF	human	ignore	x	bounce	/		FF strict, slow load
26	d1-p27-browser	11/17 05:24	81	res	Cr	agent	ignore	duckduckgo	browser	/ → /product → /pricing		
27	d1-p28-downloader	11/17 05:25	52	res	FF	human	accept	duckduckgo	downloader	/article	PDF download	
28	d1-p29-buyer	11/17 05:26	74	res	WK	human	ignore	duckduckgo	buyer	/pricing → /checkout?plan=team → /order-complete	order placed; plan team	
29	d1-p30-buyer	11/17 05:26	40	res	Cr	marked	ignore	google	buyer	/pricing → /checkout?plan=team → /order-complete	order placed; plan team	
30	d1-p01-lab-A-error-one	11/17 05:27	32	res	Cr	human	accept	direct	lab	/lab	lab A-error one	
31	d1-p02-lab-A-error-three200	11/17 05:27	38	res	Cr	human	accept	direct	lab	/lab	lab A-error three200	
32	d1-p03-lab-B-nothing-one	11/17 05:28	37	res	Cr	agent	ignore	direct	lab	/lab	lab B-nothing one	
33	d1-p05-lab-B-nothing-three200	11/17 05:29	29	res	WK	human	decline	direct	lab	/lab	lab B-nothing three200	DNT/GPC
34	d1-p06-lab-B-nothing-three500	11/17 05:29	34	res	WK	marked	ignore	direct	lab	/lab	lab B-nothing three500	
35	d1-p07-lab-B-nothing-four300	11/17 05:30	31	res	Cr	human	ignore	direct	lab	/lab	lab B-nothing four300	
36	d1-p08-lab-B-nothing-five400	11/17 05:30	34	res	WK	human	decline	direct	lab	/lab	lab B-nothing five400	
37	d1-p09-lab-B-nothing-threeSlow	11/17 05:30	31	res	FF	agent	ignore	direct	lab	/lab	lab B-nothing threeSlow	
38	d1-p10-lab-C-slow-one	11/17 05:31	22	res	Cr	human	ignore	direct	lab	/lab	lab C-slow one	uBlock Lite
39	d1-p11-lab-C-slow-three500	11/17 05:31	34	res	FF	human	accept	direct	lab	/lab	lab C-slow three500	DNT/GPC
40	d1-p12-lab-D-decorative-one	11/17 05:31	29	res	Cr	marked	ignore	direct	lab	/lab	lab D-decorative one	
41	d1-p13-lab-D-decorative-three200	11/17 05:32	30	res	FF	human	accept	direct	lab	/lab	lab D-decorative three200	FF strict
42	d1-p14-lab-E-newtab-one	11/17 05:32	34	res	FF	human	decline	direct	lab	/lab	lab E-newtab one	
43	d1-p15-lab-F-text-triple100	11/17 05:33	31	res	Cr	agent	ignore	direct	lab	/lab	lab F-text triple100	
44	d1-p16-lab-G-chart-one	11/17 05:33	34	res	Cr	human	decline	direct	lab	/lab	lab G-chart one	
45	d1-p17-lab-G-chart-three200	11/17 05:34	36	res	Cr	human	ignore	direct	lab	/lab	lab G-chart three200	DNT/GPC
46	d1-p18-lab-H-works-one	11/17 05:34	36	res	Cr	marked	ignore	direct	lab	/lab	lab H-works one	

#	Visit	Start (UTC)	s	Net	Eng	Mode	Consent	Source	Kind	Pages	Outcome	Traits
47	d1-p19-lab-H-works-three200	11/17 05:35	32	res	WK	human	decline	direct	lab	/lab	lab H-works three200	
48	d1-p20-lab-I-disabled-one	11/17 05:35	34	res	WK	human	accept	direct	lab	/lab	lab I-disabled one	
49	d1-p21-lab-I-disabled-three200	11/17 05:36	27	res	FF	agent	ignore	direct	lab	/lab	lab I-disabled three200	
50	d1-p04-reader	11/17 05:37	75	res	WK	human	decline	reddit	reader	/article	read 75%	
51	d1-p04-lab-B-nothing-two200	11/17 05:37	36	res	WK	human	decline	direct	lab	/lab	lab B-nothing two200	
52	d1-p01-again	11/17 05:38	57	res	Cr	human	accept	ads	app	/app → /app/answers → /app/settings → /app/answers → /app/forms		
53	d1-p02-again	11/17 05:38	58	res	Cr	human	accept	reddit	reader	/article	read 75%	
54	d1-p03-again	11/17 05:39	102	res	Cr	agent	ignore	reddit	browser	/ → /product → /pricing		
55	d1-p04-again	11/17 05:39	81	res	WK	human	decline	chatgpt	buyer	/pricing → /checkout?plan=team → /order-complete	order placed; plan team	
56	d1-p05-again	11/17 05:41	64	res	WK	human	decline	hackernews	product	/product → /product?id=quote → /product?id=booking		DNT/GPC
57	d1-p06-again	11/17 05:41	21	res	WK	marked	ignore	direct	bounce	/product		
58	d1-p37-app	11/17 05:57	25	dc	Cr	human	accept	linkedin	app	/app → /app/answers → /app/settings → /app/answers → /app/forms		
59	d1-p38-bounce	11/17 05:57	27	dc	Cr	human	decline	google	bounce	/		
60	d1-p39-buyer	11/17 05:58	50	dc	Cr	human	ignore	bing	buyer	/pricing → /checkout?plan=team → /order-complete	order placed; plan team	
61	d1-p40-product	11/17 05:58	25	dc	Cr	human	ignore	perplexity	product	/product → /product?id=quote → /product?id=booking		
62	d1-p41-browser	11/17 05:59	84	dc	Cr	human	accept	producthunt	browser	/ → /product → /pricing		
63	d1-p42-bounce	11/17 05:59	18	dc	Cr	human	ignore	ads	bounce	/		
64	d1-p43-contact	11/17 05:59	38	dc	Cr	human	decline	duckduckgo	contact	/ → /pricing → /contact → /thanks	form sent	
65	d1-p44-searcher	11/17 06:00	53	dc	FF	human	ignore	linkedin	searcher	/ → /search?q=quote	search	
66	d1-p45-reader	11/17 06:00	30	dc	Cr	human	accept	newsletter	reader	/article	read 21%	
67	d1-p46-reader	11/17 06:01	56	dc	Cr	human	decline	hackernews	reader	/article	read 47%	
68	d1-p35-outbound	11/17 06:38	81	VPN	WK	human	ignore	direct	outbound	/article	outbound same-tab	
69	d1-p36-bounce	11/17 06:38	33	VPN	Cr	human	decline	chatgpt	bounce	/		
70	d1-p34-browser	11/17 10:01	37	VPN	Cr	human	accept	reddit	browser	/ → /product → /pricing		

#	Visit	Start (UTC)	s	Net	Eng	Mode	Consent	Source	Kind	Pages	Outcome	Traits
71	d1-p33-reader	11/17 10:01	80	VPN	WK	human	ignore	chatgpt	reader	/article	read 86%	
72	d1-p31-lost	11/17 10:08	40	VPN	Cr	human	decline	perplexity	lost	/product → /templates	404	
73	d1-p32-downloader	11/17 10:08	80	VPN	FF	human	accept	ads	downloader	/article	PDF download	
74	d2-p16-late	11/17 23:44	39	res	Cr	human	decline	linkedin	searcher	/ → /search?q=booking+form	search	
75	d2-p17-late	11/17 23:44	41	res	Cr	human	ignore	newsletter	reader	/article	read 44%	DNT/GPC
76	d2-p18-late	11/17 23:45	35	res	Cr	marked	ignore	bing	bounce	/pricing		
77	d2-p19-late	11/17 23:45	73	res	WK	human	decline	google	downloader	/article	PDF download	
78	d2-p16-early	11/18 00:05	24	res	Cr	human	decline	chatgpt	product	/product → /product?id=quote → /product?id=booking		
79	d2-p17-early	11/18 00:05	52	res	Cr	human	ignore	producthunt	outbound	/article	outbound same-tab	DNT/GPC
80	d2-p18-early	11/18 00:06	59	res	Cr	marked	ignore	reddit	browser	/ → /product → /pricing		
81	d2-p19-early	11/18 00:06	57	res	WK	human	decline	bing	lost	/product → /templates → /	404	
82	d2-p04-alt-ip	11/18 05:17	30	res	WK	human	decline	duckduckgo	bounce	/		other network
83	d2-p05-searcher	11/18 05:17	60	res	WK	human	decline	newsletter	searcher	/ → /search?q=mobile	search	DNT/GPC
84	d2-p06-bounce	11/18 05:18	30	res	WK	marked	ignore	chatgpt	bounce	/		
85	d2-p07-alt-ip	11/18 05:19	162	res	Cr	human	ignore	x	reader	/article	read 90%	other network
86	d2-p08-app	11/18 05:19	32	res	WK	human	decline	linkedin	app	/app → /app/answers → /app/settings → /app/answers → /app/forms		
87	d2-p09-product	11/18 05:20	52	res	FF	agent	ignore	linkedin	product	/product → /product?id=quote → /product?id=booking		
88	d2-p10-downloader	11/18 05:21	105	res	Cr	human	ignore	google	downloader	/article	PDF same-tab	uBlock Lite
89	d2-p11-contact	11/18 05:22	60	res	FF	human	accept	linkedin	contact	/		DNT/GPC, slow load, error
90	d2-p12-buyer	11/18 05:23	60	res	Cr	marked	ignore	hackernews	buyer	/pricing → /checkout?plan=team → /order-complete	order placed; plan team	
91	d2-p13-outbound	11/18 05:23	98	res	FF	human	accept	producthunt	outbound	/article	outbound same-tab	FF strict
92	d2-p14-buyer	11/18 05:25	71	res	FF	human	decline	perplexity	buyer	/pricing → /checkout?plan=team → /order-complete	order placed; plan team	
93	d2-p15-browser	11/18 05:26	66	res	Cr	agent	ignore	linkedin	browser	/ → /product → /pricing		
94	d2-p01-via-vpn	11/18 06:13	122	VPN	Cr	human	accept	bing	reader	/article	read 83%	
95	d2-p03-via-vpn	11/18 06:13	38	VPN	Cr	agent	ignore	direct	lost	/product → /templates	404	
96	d2-p35-searcher	11/18 06:14	60	VPN	WK	human	ignore	reddit	searcher	/ → /search?q=quote	search	

#	Visit	Start (UTC)	s	Net	Eng	Mode	Consent	Source	Kind	Pages	Outcome	Traits
97	d2-p36-contact	11/18 06:15	68	VPN	Cr	human	decline	chatgpt	contact	/ → /pricing → /contact → /thanks	form sent	
98	d2-p02-via-vpn	11/18 06:40	48	VPN	Cr	human	accept	hackernews	browser	/ → /product → /pricing		
99	d2-p33-browser	11/18 06:40	67	VPN	WK	human	ignore	x	browser	/ → /product → /pricing		
100	d2-p34-buyer	11/18 06:41	45	VPN	Cr	human	accept	reddit	buyer	/pricing → /checkout?plan=team → /order-complete	order placed; plan team	
101	d2-p31-app	11/18 06:47	44	VPN	Cr	human	decline	duckduckgo	app	/app → /app/answers → /app/settings → /app/answers → /app/forms		
102	d2-p32-reader	11/18 06:47	91	VPN	FF	human	accept	linkedin	reader	/article	read 88%	
103	d3-p06-contact	11/19 06:05	81	res	WK	marked	ignore	direct	contact	/ → /pricing → /contact → /thanks	form sent	
104	d3-p07-buyer	11/19 06:05	73	res	Cr	human	ignore	google	buyer	/pricing → /checkout?plan=team → /order-complete	order placed; plan team	
105	d3-p08-reader	11/19 06:06	73	res	WK	human	decline	hackernews	reader	/article	read 66%	
106	d3-p09-app	11/19 06:07	62	res	FF	agent	ignore	google	app	/app → /app/answers → /app/settings → /app/answers → /app/forms		
107	d3-p11-browser	11/19 06:08	89	res	FF	human	accept	x	browser	/ → /product → /pricing		DNT/GPC
108	d3-p12-app	11/19 06:08	36	res	Cr	marked	ignore	linkedin	app	/app → /app/answers → /app/settings → /app/answers → /app/forms		
109	d3-p13-bounce	11/19 06:09	29	res	FF	human	accept	bing	bounce	/		FF strict
110	d3-p14-buyer	11/19 06:10	49	res	FF	human	decline	ads	buyer	/pricing → /checkout?plan=team → /order-complete	order placed; plan team	
111	d3-p15-browser	11/19 06:10	69	res	Cr	agent	ignore	google	browser	/ → /product → /pricing		
112	d3-p10-browser	11/19 06:12	85	res	Cr	human	ignore	direct	browser	/ → /product → /pricing		uBlock Lite
113	d4-p11-browser	11/20 04:02	93	res	FF	human	accept	hackernews	browser	/ → /product → /pricing		DNT/GPC
114	d4-p12-product	11/20 04:02	78	res	Cr	marked	ignore	direct	product	/product → /product?id=quote → /product?id=booking		
115	d4-p13-product	11/20 04:03	72	res	FF	human	accept	ads	product	/product → /product?id=quote → /product?id=booking		FF strict
116	d4-p14-searcher	11/20 04:03	58	res	FF	human	decline	linkedin	searcher	/ → /search?q=templates	search	
117	d4-p15-contact	11/20 04:05	68	res	Cr	agent	ignore	hackernews	contact	/ → /pricing → /contact → /thanks	form sent	
118	d4-p16-contact	11/20 04:05	66	res	Cr	human	decline	producthunt	contact	/ → /pricing → /contact → /thanks	form sent	

#	Visit	Start (UTC)	s	Net	Eng	Mode	Consent	Source	Kind	Pages	Outcome	Traits
119	d4-p17-reader	11/20 04:06	85	res	Cr	human	ignore	google	reader	/article	read 75%	DNT/GPC
120	d4-p18-searcher	11/20 04:06	54	res	Cr	marked	ignore	reddit	searcher	/ → /search?q=quote	search	
121	d4-p19-browser	11/20 04:08	70	res	WK	human	decline	x	browser	/ → /product → /pricing		
122	d4-p20-browser	11/20 04:08	90	res	WK	human	accept	perplexity	browser	/ → /product → /pricing		

Appendix B: Delivery matrix, what each tool received per visit

For every r4 visit, what the visit's requests to each tool got back (from the runner's network record).

✓ at least one request answered 2xx · **D** Plausible answered 202 but marked the events dropped (`x-plausible-dropped`) · **B** blocked in the browser (blocker or tracking protection) · **5** the tool answered HTTP 500 · ✗ every request failed · **S** the tool's script failed to load, so nothing was sent · · nothing sent (no request, for example after a consent opt-out, or a tool that sends nothing on that page).

Tools: **Pt** privatrak, **GA** google, **Pl** plausible, **Pi** pirsch, **Ma** matomo, **PH** posthog, **MP** mixpanel, **Am** amplitude, **Cl** clarity, **Mf** mouseflow, **Se** sentry, **LR** logrocket, **CF** cloudflare, **Fa** fathom, **Um** umami.

Visit	Pt	GA	Pl	Pi	Ma	PH	MP	Am	Cl	Mf	Se	LR	CF	Fa	Um
d1-p01-product	✓	✓	D	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	·
d1-p02-product	✓	✓	D	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	·
d1-p03-reader	✓	✓	D	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	5
d1-p05-reader	✓	✓	✓	✓	✓	✓	·	✗	·	✓	✓	✓	✓	✓	5
d1-p06-contact	✓	✓	·	✓	✓	·	✓	✓	✓	·	✓	✓	✓	✓	✗
d1-p07-downloader	✓	S	D	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	·
d1-p08-outbound	✓	✓	✓	✓	✓	✓	✓	✗	✓	✓	✓	✓	✓	✓	5
d1-p09-lost	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	5
d1-p10-browser	✓	S	S	S	S	S	S	S	S	S	S	S	S	S	S
d1-p11-reader	✓	✓	✓	✓	✓	✓	·	✓	·	✓	✓	✓	✓	✓	5
d1-p12-browser	✓	✓	·	✓	✓	·	✓	✓	✓	·	✓	✓	✓	✓	5
d1-p13-bounce	✓	B	S	✓	S	S	S	S	S	S	S	✓	S	✓	S
d1-p14-app	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	5
d1-p15-bounce	✓	✓	D	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	·
d1-p16-browser	✓	✓	D	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
d1-p17-bounce	✓	✓	D	✓	✓	✓	·	✓	·	✓	✓	✓	✓	✓	✓
d1-p18-searcher	✓	S	·	✓	✓	·	✓	✓	✓	·	✓	✓	✓	✓	✓
d1-p19-contact	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
d1-p20-lost	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
d1-p21-bounce	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
d1-p22-app	✓	✓	✓	✓	✓	✓	✓	✗	✓	✓	✓	✓	✓	✓	✓
d1-p23-outbound	✓	S	S	S	S	S	S	S	S	S	S	S	S	S	S
d1-p24-reader	✓	✓	·	✓	✓	·	✓	✓	✓	·	✓	✓	✓	✓	✓
d1-p25-searcher	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
d1-p26-bounce	✗	B	S	✗	S	S	S	S	S	S	S	S	S	✓	S
d1-p27-browser	✓	✓	D	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
d1-p28-downloader	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
d1-p29-buyer	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
d1-p30-buyer	✓	✓	·	✓	✓	·	✓	✓	✓	·	✓	✓	✓	✓	✓
d1-p01-lab-A-error-one	✓	✓	D	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
d1-p02-lab-A-error-three200	✓	✓	D	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
d1-p03-lab-B-nothing-one	✓	✓	D	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
d1-p05-lab-B-nothing-three200	✓	✓	✓	✓	·	·	·	✓	·	✓	·	✓	✓	✓	✓
d1-p06-lab-B-nothing-three500	✓	✓	·	✓	✓	·	✓	✓	✓	·	✓	✓	✓	✓	✓
d1-p07-lab-B-nothing-four300	✓	S	D	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
d1-p08-lab-B-nothing-five400	✓	✓	✓	✓	·	·	·	✓	✓	✓	·	✓	✓	✓	✓
d1-p09-lab-B-nothing-threeSlow	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
d1-p10-lab-C-slow-one	✓	S	S	S	S	S	S	S	S	S	S	S	S	S	S
d1-p11-lab-C-slow-three500	✓	✓	✓	✓	✓	✓	·	✓	·	✓	✓	✓	✓	✓	✓
d1-p12-lab-D-decorative-one	✓	✓	·	✓	✓	·	✓	✓	✓	·	✓	✓	✓	✓	✓
d1-p13-lab-D-decorative-three200	✓	B	S	✓	S	S	S	S	S	S	S	✓	S	✓	S
d1-p14-lab-E-newtab-one	✓	✓	✓	✓	·	·	·	✗	✓	✓	·	✓	✓	✓	✓
d1-p15-lab-F-text-triple100	✓	✓	D	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
d1-p16-lab-G-chart-one	✓	✓	D	✓	·	·	·	✓	✓	✓	·	✓	✓	✓	✓
d1-p17-lab-G-chart-three200	✓	✓	D	✓	✓	✓	·	✓	·	✓	✓	✓	✓	✓	✓
d1-p18-lab-H-works-one	✓	S	·	✓	✓	·	✓	✓	✓	·	✓	✓	✓	✓	✓
d1-p19-lab-H-works-three200	✓	✓	✓	✓	·	·	·	✗	✓	✓	·	✓	✓	✓	✓
d1-p20-lab-I-disabled-one	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
d1-p21-lab-I-disabled-three200	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

Visit	Pt	GA	Pl	Pi	Ma	PH	MP	Am	Cl	Mf	Se	LR	CF	Fa	Um
d1-p04-reader	✓	✓	✓	✓	✓	✓	✓	✗	✓	✓	✓	✓	✓	✓	✓
d1-p04-lab-B-nothing-two200	✓	✓	✓	✓	✓	✓	✓	✗	✓	✓	✓	✓	✓	✓	✓
d1-p01-again	✓	✓	D	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
d1-p02-again	✓	✓	D	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
d1-p03-again	✓	✓	D	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
d1-p04-again	✓	✓	✓	✓	·	·	·	✗	✓	✓	·	✓	✓	✓	✓
d1-p05-again	✓	✓	✓	✓	·	·	·	✓	·	✓	·	✓	✓	✓	✓
d1-p06-again	✓	✓	·	✓	✓	·	✓	✓	✓	·	✓	✓	✓	✓	✓
d1-p37-app	✓	✓	D	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
d1-p38-bounce	✓	✓	D	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
d1-p39-buyer	✓	✓	D	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
d1-p40-product	✓	✓	D	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
d1-p41-browser	✓	✓	D	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
d1-p42-bounce	✓	✓	D	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
d1-p43-contact	✓	✓	D	✓	✓	✓	·	✓	✓	✓	·	✓	✓	✓	✓
d1-p44-searcher	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
d1-p45-reader	✓	✓	D	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
d1-p46-reader	✓	✓	D	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
d1-p35-outbound	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
d1-p36-bounce	✓	✓	D	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
d1-p34-browser	✓	✓	D	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
d1-p33-reader	✓	✓	D	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
d1-p31-lost	✓	✓	D	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
d1-p32-downloader	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
d2-p16-late	✓	✓	D	✓	·	·	·	✓	✓	✓	·	✓	✓	✓	✓
d2-p17-late	✓	✓	D	✓	✓	✓	·	✓	·	✓	✓	✓	✓	✓	✓
d2-p18-late	✓	✓	·	✓	✓	·	✓	✓	✓	·	✓	✓	✓	✓	✓
d2-p19-late	✗	✓	✓	✓	·	✓	·	✗	S	S	·	S	✗	✓	✗
d2-p16-early	✓	✓	D	✓	·	·	·	✓	✓	✓	·	✓	✓	✓	✓
d2-p17-early	✓	✓	D	✓	✓	✓	·	✓	·	✓	✓	✓	✓	✓	✓
d2-p18-early	✓	✓	·	✓	✓	·	✓	✓	✓	·	✓	✓	✓	✓	✓
d2-p19-early	✓	✓	✓	✓	·	·	·	✓	✓	✓	·	✓	✓	✓	✓
d2-p04-alt-ip	✓	✓	✓	✓	·	·	·	✗	✓	✓	·	✓	✓	✓	✓
d2-p05-searcher	✓	✓	✓	✓	·	·	·	✗	·	✓	·	✓	✓	✓	✓
d2-p06-bounce	✓	✓	·	✓	✓	·	✓	✓	✓	·	✓	✓	✓	✓	✓
d2-p07-alt-ip	✓	✓	D	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
d2-p08-app	✓	✓	D	✓	·	·	·	✗	✓	✓	·	✓	✓	✓	✓
d2-p09-product	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
d2-p10-downloader	✓	S	S	S	S	S	S	S	S	S	S	S	S	S	S
d2-p11-contact	✓	✓	✓	✓	✓	✓	·	✓	·	✓	✓	✓	✓	✗	✓
d2-p12-buyer	✓	✓	·	✓	✓	·	✓	✓	✓	·	✓	✓	✓	✓	✓
d2-p13-outbound	✓	B	S	✓	S	S	S	S	S	S	S	S	S	✓	S
d2-p14-buyer	✓	✓	✓	✓	·	·	·	✗	✓	✓	·	✓	✓	✓	✓
d2-p15-browser	✓	✓	D	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
d2-p01-via-vpn	✓	✓	D	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
d2-p03-via-vpn	✓	✓	D	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
d2-p35-searcher	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
d2-p36-contact	✓	✓	D	✓	·	·	·	✓	✓	✓	·	✓	✓	✓	✓
d2-p02-via-vpn	✓	✓	D	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
d2-p33-browser	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
d2-p34-buyer	✓	✓	D	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
d2-p31-app	✓	✓	D	✓	·	·	·	✓	✓	✓	·	✓	✓	✓	✓
d2-p32-reader	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
d3-p06-contact	✓	S	·	✓	✓	✓	✓	✓	✓	·	✓	✓	✓	✓	✓
d3-p07-buyer	✓	✓	D	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
d3-p08-reader	✓	✓	D	✓	·	✓	·	✓	✓	✓	·	✓	✓	✓	✓
d3-p09-app	✓	✓	✓	✓	✓	✓	✓	✓	S	✓	✓	✓	✓	✓	✓
d3-p11-browser	✓	✓	✓	✓	✓	✓	·	✓	·	✓	✓	✓	✓	✓	✓
d3-p12-app	✓	✓	·	✓	✓	✓	✓	✓	✓	·	✓	✓	✓	✓	✓
d3-p13-bounce	✓	B	S	✓	S	S	S	S	S	S	S	✓	S	✓	S
d3-p14-buyer	✓	✓	✓	✓	·	✓	·	✗	✓	✓	·	✓	✓	✓	✓
d3-p15-browser	✓	✓	D	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
d3-p10-browser	✓	S	S	S	S	S	S	S	S	S	S	S	S	S	S
d4-p11-browser	✓	✓	✓	✓	✓	✓	·	✓	·	✓	✓	✓	✓	✓	✓
d4-p12-product	✓	✓	·	✓	✓	✓	✓	✓	✓	·	✓	✓	✓	✓	✓

Visit	Pt	GA	Pl	Pi	Ma	PH	MP	Am	Cl	Mf	Se	LR	CF	Fa	Um
d4-p13-product	✓	B	S	✓	S	S	S	S	S	S	S	✓	S	✓	S
d4-p14-searcher	✓	✓	✓	✓	·	✓	·	✗	✓	✓	·	✓	✓	✓	✓
d4-p15-contact	✓	✓	D	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
d4-p16-contact	✓	✓	D	✓	·	✓	·	✓	✓	✓	·	✓	✓	✓	✓
d4-p17-reader	✓	✓	D	✓	✓	✓	·	✓	·	✓	✓	✓	✓	✓	✓
d4-p18-searcher	✓	✓	·	✓	✓	✓	✓	✓	✓	·	✓	✓	✓	✓	✓
d4-p19-browser	✓	✓	✓	✓	·	✓	·	✗	✓	✓	·	✓	✓	✓	✓
d4-p20-browser	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

Totals over all 122 r4 visits (all four days)

Tool	✓ delivered	D dropped	B blocked	5 HTTP 500	✗ failed	S script failed	· nothing sent
privatrak	120	0	0	0	2	0	0
google	106	0	6	0	0	10	0
plausible	44	50	0	0	0	11	17
pirsch	116	0	0	0	1	5	0
matomo	89	0	0	0	0	11	22
posthog	82	0	0	0	0	11	29
mixpanel	77	0	0	0	0	11	34
amplitude	95	0	0	0	16	11	0
clarity	95	0	0	0	0	13	14
mouseflow	93	0	0	0	0	12	17
sentry	88	0	0	0	0	11	23
logrocket	114	0	0	0	0	8	0
cloudflare	110	0	0	0	1	11	0
fathom	116	0	0	0	1	5	0
umami	98	0	0	7	2	11	4

Appendix C: Personas in series r4

46 personas made the 122 visits. Residential personas p01-p30 (p27-p29 share one office IP), VPN personas p31-p36, data-centre personas p37-p46. A persona keeps its browser state (cookies, local storage) across its visits.

Persona	Network	Engine	Mode	Consent	Traits	Visits	Days	Kinds
p01	VPN/res	Cr	human	accept		4	1, 2	product, lab, app, reader
p02	VPN/res	Cr	human	accept		4	1, 2	product, lab, reader, browser
p03	VPN/res	Cr	agent	ignore		4	1, 2	reader, lab, browser, lost
p04	res	WK	human	decline	other network	4	1, 2	reader, lab, buyer, bounce
p05	res	WK	human	decline	DNT/GPC	4	1, 2	reader, lab, product, searcher
p06	res	WK	marked	ignore		5	1, 2, 3	contact, lab, bounce, bounce, contact
p07	res	Cr	human	ignore	other network	4	1, 2, 3	downloader, lab, reader, buyer
p08	res	WK	human	decline		4	1, 2, 3	outbound, lab, app, reader
p09	res	FF	agent	ignore		4	1, 2, 3	lost, lab, product, app
p10	res	Cr	human	ignore	uBlock Lite	4	1, 2, 3	browser, lab, downloader, browser
p11	res	FF	human	accept	DNT/GPC	5	1, 2, 3, 4	reader, lab, contact, browser, browser
p12	res	Cr	marked	ignore		5	1, 2, 3, 4	browser, lab, buyer, app, product
p13	res	FF	human	accept	FF strict	5	1, 2, 3, 4	bounce, lab, outbound, bounce, product
p14	res	FF	human	decline		5	1, 2, 3, 4	app, lab, buyer, buyer, searcher
p15	res	Cr	agent	ignore		5	1, 2, 3, 4	bounce, lab, browser, browser, contact
p16	res	Cr	human	decline		5	1, 2, 4	browser, lab, searcher, product, contact
p17	res	Cr	human	ignore	DNT/GPC	5	1, 2, 4	bounce, lab, reader, outbound, reader
p18	res	Cr	marked	ignore		5	1, 2, 4	searcher, lab, bounce, browser, searcher
p19	res	WK	human	decline		5	1, 2, 4	contact, lab, downloader, lost, browser
p20	res	WK	human	accept		3	1, 4	lost, lab, browser
p21	res	FF	agent	ignore		2	1	bounce, lab
p22	res	WK	human	decline		1	1	app
p23	res	Cr	human	accept	uBlock Lite	1	1	outbound
p24	res	Cr	marked	ignore		1	1	reader
p25	res	WK	human	ignore		1	1	searcher
p26	res	FF	human	ignore	FF strict	1	1	bounce
p27	res	Cr	agent	ignore		1	1	browser
p28	res	FF	human	accept		1	1	downloader
p29	res	WK	human	ignore		1	1	buyer
p30	res	Cr	marked	ignore		1	1	buyer
p31	VPN	Cr	human	decline		2	1, 2	lost, app
p32	VPN	FF	human	accept		2	1, 2	downloader, reader
p33	VPN	WK	human	ignore		2	1, 2	reader, browser
p34	VPN	Cr	human	accept		2	1, 2	browser, buyer
p35	VPN	WK	human	ignore		2	1, 2	outbound, searcher
p36	VPN	Cr	human	decline		2	1, 2	bounce, contact
p37	dc	Cr	human	accept		1	1	app
p38	dc	Cr	human	decline		1	1	bounce
p39	dc	Cr	human	ignore		1	1	buyer
p40	dc	Cr	human	ignore		1	1	product
p41	dc	Cr	human	accept		1	1	browser
p42	dc	Cr	human	ignore		1	1	bounce
p43	dc	Cr	human	decline		1	1	contact
p44	dc	FF	human	ignore		1	1	searcher
p45	dc	Cr	human	accept		1	1	reader
p46	dc	Cr	human	decline		1	1	reader

Appendix D: Ground truth per tool, 17 and 18 Nov (UTC)

Computed from the manifest: for each tool only the visits whose requests to that tool were answered 2xx (`ALL` = every visit, including two check visits on 17 Nov). Consent-gated tools: upper bounds.

Tool	Visits	Personas	Person-days	Page views	17 Nov visits / views	18 Nov visits / views	France visits / pd	/article views	/article mean s	Funnel	PDF	Outbound	404	Purchases
ALL	104	47	72	201	79 / 142	25 / 59	19 / 12	25	77.0	23 → 4 → 4	5	7	5	7
amplitude	82	41	60	164	63 / 118	19 / 46	16 / 10	17	73.3	20 → 4 → 4	3	3	5	5
clarity	84	40	60	176	64 / 123	20 / 53	14 / 9	17	77.8	22 → 4 → 4	3	4	5	7
cloudflare	95	43	66	190	72 / 133	23 / 57	18 / 11	21	76.2	22 → 4 → 4	3	5	5	7
fathom	99	45	68	194	76 / 137	23 / 57	19 / 12	23	77.0	22 → 4 → 4	4	6	5	7
google	92	43	65	186	69 / 129	23 / 57	18 / 11	21	77.3	22 → 4 → 4	3	5	5	7
logrocket	97	44	67	192	74 / 135	23 / 57	18 / 11	21	76.2	22 → 4 → 4	3	5	5	7
matomo	78	43	58	150	63 / 119	15 / 31	13 / 9	20	76.7	19 → 3 → 3	3	4	4	5
mixpanel	69	39	52	138	56 / 109	13 / 29	9 / 7	16	78.6	18 → 2 → 2	3	3	4	5
mouseflow	82	38	58	165	62 / 115	20 / 50	15 / 9	20	77.3	16 → 3 → 3	3	5	5	5
pirsch	99	44	68	194	75 / 136	24 / 58	18 / 11	23	77.0	22 → 4 → 4	4	6	5	7
plausible	39	18	26	71	30 / 52	9 / 19	3 / 2	11	79.1	5 → 1 → 1	3	4	3	3
posthog	66	38	50	126	54 / 102	12 / 24	10 / 7	20	77.7	13 → 2 → 2	4	4	4	3
privatrak	102	46	71	199	77 / 140	25 / 59	18 / 11	24	77.1	23 → 4 → 4	4	7	5	7
sentry	77	42	57	146	62 / 115	15 / 31	13 / 9	20	76.7	18 → 2 → 2	3	4	4	5
umami	83	43	66	164	60 / 107	23 / 57	15 / 11	16	72.8	20 → 3 → 3	2	4	4	7

Top sources delivered, per tool (visits)

Tool	Sources
ALL	direct 26, linkedin 11, duckduckgo 8, hackernews 8, google 8, reddit 8
amplitude	direct 20, linkedin 9, duckduckgo 7, reddit 7, hackernews 7, producthunt 6
clarity	direct 21, duckduckgo 8, reddit 8, linkedin 8, chatgpt 7, google 6
cloudflare	direct 24, linkedin 10, duckduckgo 8, reddit 8, hackernews 7, chatgpt 7
fathom	direct 25, linkedin 10, duckduckgo 8, reddit 8, producthunt 7, google 7
google	direct 22, linkedin 9, reddit 8, duckduckgo 7, google 7, hackernews 7
logrocket	direct 25, linkedin 11, duckduckgo 8, reddit 8, hackernews 7, chatgpt 7
matomo	direct 19, reddit 8, linkedin 8, producthunt 6, duckduckgo 6, hackernews 6
mixpanel	direct 17, reddit 8, linkedin 6, hackernews 6, producthunt 5, duckduckgo 5
mouseflow	direct 20, linkedin 9, duckduckgo 8, reddit 7, chatgpt 6, producthunt 5
pirsch	direct 25, linkedin 11, duckduckgo 8, reddit 8, producthunt 7, google 7
plausible	direct 12, linkedin 4, perplexity 3, reddit 3, hackernews 3, duckduckgo 3
posthog	direct 15, reddit 7, linkedin 7, duckduckgo 6, producthunt 5, newsletter 4
privatrak	direct 26, linkedin 11, duckduckgo 8, hackernews 8, reddit 8, producthunt 7
sentry	direct 19, reddit 8, linkedin 8, producthunt 6, hackernews 6, duckduckgo 5
umami	direct 23, linkedin 10, hackernews 7, chatgpt 7, reddit 7, duckduckgo 6

/lab test elements, per tool (visits with a click / with rage clicks)

Tool	Clicked	Rage
ALL	A-error 2, B-nothing 7, C-slow 2, D-decorative 2, E-newtab 1, F-text 1, G-chart 2, H-works 2, I-disabled 2	A-error 1, B-nothing 4, C-slow 1, D-decorative 1, F-text 1, G-chart 1, H-works 1, I-disabled 1
amplitude	A-error 2, B-nothing 6, C-slow 1, D-decorative 1, F-text 1, G-chart 2, H-works 1, I-disabled 2	A-error 1, B-nothing 4, C-slow 1, F-text 1, G-chart 1, I-disabled 1
clarity	A-error 2, B-nothing 6, D-decorative 1, E-newtab 1, F-text 1, G-chart 1, H-works 2, I-disabled 2	A-error 1, B-nothing 3, F-text 1, H-works 1, I-disabled 1
cloudflare	A-error 2, B-nothing 7, C-slow 1, D-decorative 1, E-newtab 1, F-text 1, G-chart 2, H-works 2, I-disabled 2	A-error 1, B-nothing 4, C-slow 1, F-text 1, G-chart 1, H-works 1, I-disabled 1
fathom	A-error 2, B-nothing 7, C-slow 1, D-decorative 2, E-newtab 1, F-text 1, G-chart 2, H-works 2, I-disabled 2	A-error 1, B-nothing 4, C-slow 1, D-decorative 1, F-text 1, G-chart 1, H-works 1, I-disabled 1

Tool	Clicked	Rage
google	A-error 2, B-nothing 6, C-slow 1, D-decorative 1, E-newtab 1, F-text 1, G-chart 2, H-works 1, I-disabled 2	A-error 1, B-nothing 3, C-slow 1, F-text 1, G-chart 1, H-works 1, I-disabled 1
logrocket	A-error 2, B-nothing 7, C-slow 1, D-decorative 2, E-newtab 1, F-text 1, G-chart 2, H-works 2, I-disabled 2	A-error 1, B-nothing 4, C-slow 1, D-decorative 1, F-text 1, G-chart 1, H-works 1, I-disabled 1
matomo	A-error 2, B-nothing 5, C-slow 1, D-decorative 1, F-text 1, G-chart 1, H-works 1, I-disabled 2	A-error 1, B-nothing 2, C-slow 1, F-text 1, G-chart 1, I-disabled 1
mixpanel	A-error 2, B-nothing 5, D-decorative 1, F-text 1, H-works 1, I-disabled 2	A-error 1, B-nothing 2, F-text 1, I-disabled 1
mouseflow	A-error 2, B-nothing 6, C-slow 1, E-newtab 1, F-text 1, G-chart 2, H-works 1, I-disabled 2	A-error 1, B-nothing 3, C-slow 1, F-text 1, G-chart 1, H-works 1, I-disabled 1
pirsch	A-error 2, B-nothing 7, C-slow 1, D-decorative 2, E-newtab 1, F-text 1, G-chart 2, H-works 2, I-disabled 2	A-error 1, B-nothing 4, C-slow 1, D-decorative 1, F-text 1, G-chart 1, H-works 1, I-disabled 1
plausible	B-nothing 4, C-slow 1, E-newtab 1, H-works 1, I-disabled 2	B-nothing 2, C-slow 1, H-works 1, I-disabled 1
posthog	A-error 2, B-nothing 4, C-slow 1, F-text 1, G-chart 1, I-disabled 2	A-error 1, B-nothing 1, C-slow 1, F-text 1, G-chart 1, I-disabled 1
privatrak	A-error 2, B-nothing 7, C-slow 2, D-decorative 2, E-newtab 1, F-text 1, G-chart 2, H-works 2, I-disabled 2	A-error 1, B-nothing 4, C-slow 1, D-decorative 1, F-text 1, G-chart 1, H-works 1, I-disabled 1
sentry	A-error 2, B-nothing 5, C-slow 1, D-decorative 1, F-text 1, G-chart 1, H-works 1, I-disabled 2	A-error 1, B-nothing 2, C-slow 1, F-text 1, G-chart 1, I-disabled 1
umami	A-error 2, B-nothing 7, C-slow 1, D-decorative 1, E-newtab 1, F-text 1, G-chart 2, H-works 2, I-disabled 2	A-error 1, B-nothing 4, C-slow 1, F-text 1, G-chart 1, H-works 1, I-disabled 1

Appendix E: MCP test round 1, every answer as the assistant gave it

19 Nov, 09:25-09:40 UTC, Claude Code headless, model Sonnet, one session per server, allowed only that server's tools. Status and difficulty (5 = one obvious call, 1 = not possible) are the assistant's own. Text is quoted from each run's closing JSON; IP addresses removed.

Privatrak

Q	Status	Answer	Definition in this tool	Calls	Diff.
1	answered	72 unique sessions (17 Nov: 47, 18 Nov: 25); 200 page views (140 / 60); 175 page views excluding automated visits	unique_sessions = visitors counted per day from a daily-rotating hash and summed over days (approximate); page views = pageview events, including automated unless filtered	3	4
2	answered	LinkedIn 11, Google 8, DuckDuckGo 7, Product Hunt 7, Direct or unknown 6 (tied with Hacker News 6 and Reddit 6). Direct = 8.3% of 72 visitors, 5th to 7th.	visitors counted once per day by their first page view's source	1	5
3	not_possible	No country or geography property exists in the server, so visitors from France cannot be counted	n/a	1	1
4	answered	61 seconds average time on /article (24 views)	mean active seconds on the page over page views that reported a value	1	5
5	answered	Existing funnel 'Contact': 24 sessions at /pricing, 4 at /contact, 4 at /thanks (16.7% overall)	sessions = visitor-days reaching each step in order	2	4
6	answered	4 'File download' events (3 on 17 Nov, 1 on 18 Nov), all with the text 'Download the checklist (PDF, 2 KB)'	feature events (clicks), not visitors; matched by feature and link text, not by file URL	2	4
7	answered	6 'Outbound link' events (5 and 1), all with the text 'forms tutorial'	feature events (clicks), not visitors; the w3.org target URL cannot be checked	2	4
8	answered	Most rage clicks: 'Duplicate form' button with 4. Most dead clicks: 'Duplicate form' with 7.	page views in which the element had the signal, at most once per element per page view; not raw clicks	1	5
9	partial	5 page views of /templates (3 on 17 Nov, 2 on 18 Nov). Whether they returned a 404 cannot be confirmed.	pageview events on that path	2	3
10	answered	7 'Purchase' events; revenue 56 EUR (32 on 17 Nov, 24 on 18 Nov)	events counted, revenue summed from the attrs.total detail (project EUR)	3	3

Read tools: get_project, list_projects, get_overview, list_pages, list_sources, list_campaigns, get_campaign_goals, list_ai_assistants, list_features, get_feature_timeseries, list_feature_rules, list_elements, list_click_problems, list_funnels, get_funnel, get_funnel_trend, preview_funnel, preview_feature_rule, get_flow, find_flow_nodes, run_insights_query, list_property_keys, list_property_values, list_dashboards, get_dashboard, get_review_data, list_reviews, get_review, get_review_follow_up, list_setup_runs, get_setup_run, search_docs, read_docs_page

Write tools: start_setup_run, undo_setup_run, create_funnel, update_funnel, delete_funnel, create_feature_rule, update_feature_rule, delete_feature_rule, create_dashboard, rename_dashboard, delete_dashboard, add_widget, update_widget, remove_widget, resolve_click_problem, ignore_click_problem, reopen_click_problem, save_review, update_review, update_review_recommendation

Setup test: Created funnel 'MCP test: contact funnel' with pageview steps /pricing, /contact, /thanks, in a setup run → **created**. I previewed the steps first; all three matched events. The funnel counts only from 19 Nov. Not undone, as instructed.

Notes: The server exposes all dates in UTC and selected 17-18 Nov exactly. Data starts 15 Nov. unique_sessions are per-day counts summed, so they are approximate. The 'visitors' number is 72 on the overview and in sources. Friction counts are page views with the signal, not raw clicks. No country or status code data. A project id had to be passed on every call.

PostHog

Q	Status	Answer	Definition in this tool	Calls	Diff.
1	answered	41 unique visitors (persons), 106 pageviews, 53 sessions for 2026-11-17..2026-11-18. Per day: 17 Nov 39 visitors / 76 pageviews / 40 sessions; 18 Nov 14 visitors / 30 pageviews / 14 sessions.	Visitors = unique person_id (distinct_id) with a $pageview, per day or per period; daily visitors sum to 53 because returning visitors count once per day. Pageviews = $pageview events. query-web-overview confirms 41/106/53.	3	4
2	answered	By referring domain (visitors/sessions): Direct 17/19; linkedin.com 7/7; duckduckgo.com 6/6; reddit.com 6/7; news.ycombinator.com 4/4; perplexity.ai 4/4. A further 4 direct visitors carry utm_source=Newsletter (direct would be 21 including them).	Visitors = unique persons; grouping on $referring_domain and utm_source, with $direct meaning no referrer. No ready-made channel report was used.	1	3
3	answered	6 visitors from France (FR), 15 pageviews.	Unique persons with a $pageview where $geoip_country_code = FR.	1	4
4	answered	59.4 seconds average on /article (11 leave events, 9 visitors).	Mean of $prev_pageview_duration on $pageleave events whose $prev_pageview_pathname is /article; only visits that sent a pageleave count.	2	3
5	partial	11 visitors reached /pricing, 0 reached /contact, 0 reached /thanks, in order (1-day window). A saved funnel exists (insight) but is a rolling last-7-days insight, so I recomputed the period myself.	Unique persons by windowFunnel on $pageview with $pathname exact, 86400 s window. No pageviews of /contact or /thanks exist in the period.	4	3
6	answered	3 clicks on the PDF download link, by 3 people (/article page).	Autocapture click events whose element link points to /mapleform-checklist.pdf; no dedicated download event exists.	2	3
7	answered	2 outbound clicks to https://www.w3.org/WAI/tutorials/forms/, by 2 people.	Autocapture clicks with $external_click_url equal to the w3.org URL.	2	3
8	answered	Dead clicks on /lab: 'Duplicate form' button 6 (3 people), 'Save draft' 2, 'Publish form' 1, paragraph 1, svg rect 1. Rage clicks: three buttons tie at 1 each (Save draft, Publish form, Duplicate form), so no single top element.	Counts of $dead_click and $rageclick events on pathname /lab, grouped by $el_text and element id/tag from elements_chain.	2	3
9	answered	3 not_found events on /templates (3 persons, 3 sessions); also 3 $pageview events on /templates.	Custom event not_found counted for the period; the 404 pageviews are normal $pageview events on /templates.	2	4
10	answered	3 Purchase events, total revenue 24.0 EUR (3 persons).	Count of the Purchase event and sum of its revenue property; currency property is EUR on all three. Project base currency is USD.	2	4

Read tools: exec (single gateway: help, tools, search, info, schema, learn, call), execute-sql (HogQL over events, persons, sessions, system.* tables), read-data-schema (events, properties, values), query-trends, query-funnel, query-retention, query-paths, query-stickiness, query-lifecycle, query-web-overview, query-web-stats, query-web-vitals, query-*-actors variants, insight-get / insights-list / insight-query, dashboards-get-all / dashboard-get, actions-get-all, persons-list / persons-retrieve, session recording and replay-vision queries, error tracking, logs, APM, LLM trace queries, feature-flag, experiment, survey, cohort, workflow read tools, project-get / projects-get / organizations-get, billing, health-issues, docs-search, generate-app-url

Write tools: insight-create / insight-update / insight-delete, dashboard-create / update / delete / tile and widget tools, action-create / update / delete, cohorts-create / partial-update, create-feature-flag / update-feature-flag / delete-feature-flag and flag enable/disable/archive, experiment-create / launch / end / delete, survey-create / launch / stop / delete, alert-create / update / delete, annotation-create / delete, event-definition and property-definition updates, project-settings-update / project-create / switch-project, persons-bulk-delete / persons-property-set / persons-property-delete, workflows, broadcasts, cdp-functions create/update/publish, data-warehouse source create, view-create, endpoint-create, subscriptions, notebooks, skills, scout and inbox writes, agent-feedback

Setup test: Created funnel insight 'MCP test: contact funnel' with 3 ordered $pageview steps filtered on $pathname exact /pricing, /contact, /thanks. → **created**. Default conversion window was set to 14 days, date range last 7 days. Nothing existing was changed.

Notes: The posthog server first failed with CONNECT_TIMEOUT and worked after retrying through ToolSearch. Almost every answer used execute-sql because no typed tool covers downloads, outbound clicks, per-element dead/rage clicks or per-page time on page. The first windowFunnel SQL failed (DateTime64 type) and needed toDateTime(). Data came from the project's own events and no bot filter was applied. The two SQL sessions count (53) matches the web overview. No send_feedback or agent-feedback call was made.

Mixpanel

Q	Status	Answer	Definition in this tool	Calls	Diff.
1	answered	40 unique users and 124 page views over 17-18 Nov 2026. Per day: 17 Nov 40 users / 95 views; 18 Nov 13 users / 29 views.	Users = unique distinct IDs who fired the [Auto] Page View event ($mp_web_page_view). Page views = total events. Daily user counts are not additive (40 + 13 > 40 overall).	3	3
2	partial	By $referring_domain, unique users: clicklab.privatrak.com (internal) 20, google.com 8, reddit.com 7, linkedin.com 6, news.ycombinator.com 6, duckduckgo.com 5, t.co 2, chatgpt.com 4, perplexity.ai 3, bing.com 3. 'undefined' (probably direct / no referrer) 19. Total 40 users.	Unique users of Page View grouped by the referring domain property. This is not a channel or source classification, and one user can be counted under several domains, so rows can exceed the total.	1	3
3	answered	France: 5 unique users (of 40).	Unique users with Page View grouped by mp_country_code (names shown as countries).	1	4
4	not_possible	No time on page or engagement duration data is available.	No duration or engagement property exists on events. Only scroll events and session events exist, and the session events show no volume.	0	1
5	answered	/pricing 13 visitors, then /contact 1, then /thanks 1 (overall conversion 8%). The existing funnel did not match: it is not limited to this period and has no /thanks step.	Unique users in an ordered funnel of Page Views filtered by current_url_path, 7-day conversion window, 17-18 Nov.	3	3
6	partial	3 clicks on a link to /mapleform-checklist.pdf.	Total [Auto] Element Click events where the element href is /mapleform-checklist.pdf. Not a true download event (no file download tracking).	1	3
7	partial	1 click on https://www.w3.org/WAI/tutorials/forms/.	Total [Auto] Element Click events with that href. Not a dedicated outbound-click event.	1	3
8	answered	On /lab: rage clicks: element id 'b' 1 (one more rage click without element id). Dead clicks: element id 'b' 11, element 'a' 4.	Total [Auto] Rage Click and Dead Click events with $pathname = /lab, grouped by $el_id (element id only, not selector or text). Counts are small.	4	2
9	partial	3 page views of /templates, all with the title 'Page not found'.	Total Page View events with current_url_path = /templates. Mixpanel has no status code; the 404 is inferred from the page title.	2	3
10	answered	5 Purchase events (5 unique users); sum of amount = 40, all in EUR.	Total Purchase events; revenue = sum of the 'amount' event property, broken down by 'currency' (only EUR appeared).	3	3

Read tools: Get-Business-Context, Get-Events, List-Properties, Get-Property-Values, Get-Query-Schema, Run-Query (insights/funnels/flows/retention), Display-Query, Search-Entities, Get-Report, List-Dashboards, Get-Dashboard, List-Cohorts, Get-Cohort, Describe-Cohort-Schema, Get-Live-Events, Get-Issues, Get-Audit-Log, Get-Lookup-Table, Get-Custom-Property, List-Metrics, Get-Metric, List-Experiments, Get-Experiment, List-Feature-Flags, Get-Feature-Flag, Find-Duplicate-Groups, Get-Lexicon-URL, Get-Project-Token, Get-Projects, List-Organizations, Get-User-Replays-Data, Search-Prior-Experiments, experiment and feature-flag guidance tools

Write tools: Create-Dashboard, Update-Dashboard, Delete-Dashboard, Duplicate-Dashboard, Create-Cohort, Update-Cohort, Delete-Cohort, Create-Feature-Flag, Update-Feature-Flag, Create-Experiment, Update-Experiment, Create-Metric, Update-Metric, Create-Custom-Property, Update-Custom-Property, Create-Lookup-Table, Update-Lookup-Table, Create-Tag, Rename-Tag, Delete-Tag, Edit-Event, Edit-Property, Bulk-Edit-Events, Bulk-Edit-Properties, Fill-Event-Metadata, Merge-Group, Dismiss-Duplicate-Group, Dismiss-Issues, Update-Business-Context

Setup test: Ran the funnel /pricing -> /contact -> /thanks (page views filtered by current_url_path) as a report named 'MCP test: contact funnel' and saved it on a new board with the same name. → **created**. Board. There is no standalone save-funnel tool, so a board was used. The funnel inside covers 17-18 Nov (13 / 1 / 1), 7-day window. Nothing existing was changed.

Notes: Mixpanel servers needed several ToolSearch retries to connect (initial CONNECT_TIMEOUT). Dates used: 17-18 Nov 2026 exactly (absolute range). Rage/dead click events lack current_url_path; use $pathname. No status code, download or outbound event, so Q6, Q7 and Q9 rest on click href and page title. 'undefined' referrer rows likely mean direct. Counts are very small (e.g. rage clicks 1).

Plausible

Q	Status	Answer	Definition in this tool	Calls	Diff.
1	answered	31 visitors, 31 visits, 77 pageviews for 2026-11-17..2026-11-18. Per day: 17 Nov = 19 visitors / 52 pageviews; 18 Nov = 12 visitors / 25 pageviews.	Visitors = unique visitors in the period; visits = sessions; pageviews = pageview events.	2	5

Q	Status	Answer	Definition in this tool	Calls	Diff.
2	answered	Top sources by visitors (visits are identical): Direct / None 5, Google 5, LinkedIn 4, DuckDuckGo 3, Perplexity 3 (then Hacker News 2, Newsletter 2, Reddit 2, Bing 1, ChatGPT 1). Direct is tied first with Google at 5 visitors; with a tie, the top 5 distinct sources are Direct, Google, LinkedIn, DuckDuckGo, Perplexity.	visit:source, counted in unique visitors and visits.	1	5
3	answered	France: 2 visitors.	Unique visitors by country name (UTC period).	1	5
4	answered	/article time_on_page = 66 (12 visitors, 11 pageviews). The tool does not state the unit; assumed to be seconds.	time_on_page metric from Plausible: average engaged time on the page. The unit is not stated in the output.	1	4
5	partial	No funnel tool. Separate unique-visitor counts: /pricing 8, /contact 1, /thanks 1 (goals 'Visit /pricing' 8, 'Visit /contact' 1, 'Visit /thanks' 1). Order/sequence not verified.	Visitors who visited each page at least once; not an ordered funnel.	3	3
6	answered	3 downloads of https://clicklab.privatrak.com/mapleform-checklist.pdf (3 visitors, 3 events; goal 'File Download' total is also 3).	Events of the 'File Download' goal, split by custom property url.	2	4
7	answered	4 clicks (4 visitors) on https://www.w3.org/WAI/tutorials/forms/; the goal 'Outbound Link: Click' total is 4.	Events of the 'Outbound Link: Click' goal, split by property url.	2	4
8	not_possible	Cannot answer: the server has no rage-click, dead-click or element data.	n/a	0	1
9	answered	3 visitors / 3 events on the '404' goal, all on page /templates.	Events of the '404' goal; the page dimension confirmed the path.	1	4
10	partial	Purchase: 3 events, 3 visitors. Revenue: not obtainable. Every call requesting total_revenue/average_revenue failed with an Output validation error. The Purchase events have no 'value' property.	Events of the 'Purchase' goal; revenue should come from total_revenue (in the site's revenue currency).	5	2

Read tools: get_timeseries: metrics over time by hour/day/week/month, get_breakdown: metrics by a dimension (page, source, country, device, goal, custom property), get_conversions: goal conversion counts and rates, optionally by page, compare_periods: two date ranges side by side

Write tools: none

Setup test: Looked for a write tool to create an 'MCP test:' object; none exists on this server. → **not_supported**. The server is read-only. No workaround attempted.

Notes: Exact period 2026-11-17..2026-11-18 supported. Revenue metrics (total_revenue, average_revenue) trigger 'Output validation error' in get_breakdown, get_timeseries and compare_periods; this looks like a server bug and may reflect missing revenue values on the Purchase events. No funnel support and no click-problem (rage/dead click) data. time_on_page has no stated unit. Goal names have to be found via a get_breakdown by event:goal, since there is no list-goals tool.

Pirsch

Q	Status	Answer	Definition in this tool	Calls	Diff.
1	answered	Period 2026-11-17..2026-11-18 (timezone=UTC): 64 visitors, 195 views, 79 sessions. 17 Nov: 43 visitors / 131 views / 53 sessions. 18 Nov: 25 visitors / 64 views / 26 sessions.	visitors = unique visitors; views = page views; sessions counted separately	2	5
2	answered	Top 5 by visitors: LinkedIn 10 (10 sessions), Google 9 (10 sessions), Direct (empty referrer) 8 (8), DuckDuckGo 7 (7), Hacker News 7 (7). Direct ranks 3rd. Reddit and Product Hunt also have 7 visitors, so fifth place is a tie.	visitors = unique visitors per referrer; sessions given too	2	5
3	answered	France (fr): 12 visitors (18.75% of 64)	unique visitors by country	1	5
4	answered	/article: average_time_spent_seconds 1096 (22 views, 20 visitors, bounce rate 77.3%)	average time spent on the page in seconds; only returned with includeAverageTimeOnPage=true	4	3
5	partial	The funnels metric returned 'not found' (2 tries), so no funnel could be read or computed. Per-page visitors only (not ordered): /pricing 23, /contact 4, /thanks 4.	page visitors = unique visitors who viewed the path in the period; not a sequence	3	2
6	answered	3 'File Download' events for /mapleform-checklist.pdf (3 visitors)	event count with metadata file=/mapleform-checklist.pdf	2	4
7	answered	6 'Outbound Link Click' events (6 visitors, 7 views) with url=https://www.w3.org/WAI/tutorials/forms/	event count filtered by metadata key url	2	4
8	not_possible	Pirsch has no rage-click or dead-click data and no element-level click data.	n/a	0	1
9	answered	5 '404 Page Not Found' events from 5 visitors (13 views), path=/templates. Page stats for /templates: 5 visitors, 5 views.	custom event count with metadata path; plus ordinary page views of /templates	2	4
10	answered	7 Purchase events (7 visitors, 21 views). Revenue total 56 (average 8) from the goal's custom metric 'revenue'. The tool gives no currency, so EUR is not confirmed.	Purchase goal: visitors with the event; custom_metric_total = sum of the revenue metric	3	3

Read tools: pirsch_get_domain: returns the default domain, pirsch_list_domains: lists domains with id, hostname and timezone, pirsch_query_statistics: one tool, many metrics (total, visitors, pages, entry/exit pages, time_on_page, session_duration, events, event_metadata, event_list, event_pages, conversion_goals, growth, active_visitors, time_of_day, referrers, UTM, countries/regions/cities, browsers/OS/platforms/screen classes, languages, tags, keywords, funnels) with filters

Write tools: none

Setup test: No write tool exists, so nothing was created → **not_supported**. Server is read-only; no workaround attempted.

Notes: Domain timezone is Asia/Bangkok; pass timezone=UTC to get UTC days. funnels metric returned 'not found' on both calls (no funnel id parameter, so unclear whether a funnel exists). pages shows average_time_spent_seconds 0 unless includeAverageTimeOnPage=true. time_on_page ignored the path filter. Revenue has no currency in the output. Referrer names are inconsistent (e.g. 'Google' and 'google' are separate rows). Total calls to the Pirsch server: 20, including 2 failed funnels calls.

Matomo Cloud

Q	Status	Answer	Definition in this tool	Calls	Diff.
1	partial	Range 2026-11-17 to 2026-11-18 selected exactly. Visits: 49. Page views: 103 (Page URLs report); actions: 117. Unique visitors per day: 17 Nov = 39, 18 Nov = 7 (visits 42 and 7; page views per day not requested). Unique visitors for the whole range are not available (nb_uniq_visitors disabled for range periods); 39+7=46 is a non-deduplicated sum.	Visits = Matomo sessions; unique visitors = distinct visitor IDs per day; pageviews = Page URLs hits; actions = pageviews + events + downloads + outlinks	4	3
2	answered	All Channels (visits): 1) Keyword not defined (search, no keyword) 13; 2) LinkedIn 7; 3) Hacker News 5; 4) reddit 5 (Hacker News and reddit tie at 5); 5) November-Launch (campaign) 4. Then ChatGPT 3, Perplexity 3, forms-us (campaign) 2. Direct traffic does not appear as a row: the rows sum to 42 of 49 visits, leaving 7 visits unlisted, presumably direct. Matomo does not show them in this report.	Visits (sessions) per referrer in the Referrers All Channels report	1	3
3	answered	France: 10 visits (20.4% of visits), 26 actions, €16 revenue. Unique visitors for France in the range are not reported.	Visits from country FR (Country report, range)	1	4
4	answered	/article: avg time on page 00:03:55 (235 s), 14 page views, 14 unique page views, bounce rate 67%, exit rate 79%. The variant /article?ref=producthunt is listed separately (1 view, 00:00:44).	Average time on page in the Page URLs report (flat), time between this pageview and the next action; last pageview of a visit has no time	1	4
5	answered	Existing funnel on goal 1 (Visit /thanks): /pricing 14 visits, /contact 1, /thanks 1. Proceeded rate from Pricing to Contact is 7%, and from Contact to Thanks 100%.	Step visits in the existing Funnels report for goal 1, counted as visits in the range; steps are not required to be in strict order ('Required: No')	2	4
6	answered	/mapleform-checklist.pdf: 2 downloads, 2 unique downloads. The File download goal also has 2 conversions.	Downloads = clicks on a download link (Matomo cannot tell whether the download completed); unique downloads = visits with a click	1	5
7	answered	www.w3.org/WAI/tutorials/forms/: 1 click, 1 unique click.	Outlinks = clicks on links leaving the site; unique = visits with a click	1	5
8	not_possible	Not available. Matomo has no rage-click or dead-click report, and searching the API method list for 'click' returned nothing.	n/a	1	1
9	answered	/templates: 2 page views, 2 unique page views (Page URLs report). The page title 'Page not found' also shows 2 page views and 2 unique page views, so the 404 page was visited 2 times. Avg time on page 00:08:38.	Pageviews of the 404 page, identified through URL /templates and through the title 'Page not found'	2	3
10	answered	'Purchase' events: 4 (4 visits, no event value). Ecommerce orders: 4, revenue €32 (average order value €8; 4 purchased items). Site currency is EUR.	Events = tracked event actions named 'Purchase'; revenue = ecommerce order revenue	2	4

Read tools: matomo_site_list/search/get: find and read sites, matomo_goal_list/get: goals, matomo_segment_list/get: saved segments, matomo_dimension_list/get: custom dimensions, matomo_report_list: report catalog for a site, matomo_report_metadata: report details, matomo_report_processed: fetch any report data, matomo_api_list/get: browse raw API methods and signatures, matomo_api_call_read: raw read call

Write tools: matomo_api_call_create: create via raw API method, matomo_api_call_update: update via raw API method, matomo_api_call_delete: delete via raw API method, matomo_api_call_full: raw call, any category

Setup test: Goals.addGoal idSite=1, name 'MCP test: thanks page', matchAttribute=url, pattern=/thanks, patternType=contains → **created**. Created through matomo_api_call_create. The goal is not re-read with matomo_goal_get, so the created definition is reported from the API's returned id.

Notes: Unique visitors cannot be requested for a multi-day range (Matomo setting). Direct traffic is not shown as a row in All Channels. Site name and URL carry a trailing dot ('privatrak.com.'). Data was available for both days; 18 Nov holds only 7 visits. The funnel steps are not strictly ordered ('Required: No'). Rage and dead clicks are not supported.

Google Analytics 4

Q	Status	Answer	Definition in this tool	Calls	Diff.
1	answered	17-18 Nov 2026 (property timezone America/Los_Angeles): 26 active users (28 total users), 40 sessions, 94 page views. Per day: 17 Nov = 23 active users / 25 total users / 29 sessions / 64 views; 18 Nov = 10 / 11 / 11 / 30. Daily users do not sum to 26 because users are deduplicated across days.	activeUsers = users with an engaged session or a first_visit/first-open event; totalUsers = all unique users; screenPageViews = page_view events. Days are in the property timezone, America/Los_Angeles, not UTC.	2	4
2	answered	Top 5 by sessions (users/sessions): linkedin.com / referral 6/7; google / organic 5/5; reddit.com / referral 3/4; then a 4-way tie at 3 users / 3 sessions: (direct) / (none), bing / organic, chatgpt.com / ai-assistant, t.co / referral. Direct = 3 users / 3 sessions, tied 4th to 7th. Other sources: news.ycombinator.com / referral 2/3, Newsletter / email 2/2, google / cpc 2/2, perplexity.ai / ai-assistant 2/2, duckduckgo / organic 1/2, (not set) 1/1.	sessionSourceMedium; activeUsers counted per row and sessions = session_start-based sessions. Ties are broken arbitrarily.	1	4
3	answered	France: 4 active users, 8 sessions.	country dimension, activeUsers (users with an engaged session or first visit) and sessions.	1	5
4	partial	/article: 618 s total userEngagementDuration, 8 active users, 11 page views, bounce rate 0.2. By my own division of those values: about 77 s per active user, about 56 s per page view. The tool also reported averageSessionDuration 281.5 s for /article (a session-level metric, not time on page).	userEngagementDuration = total foreground engagement seconds; GA4 has no native 'average time on page' metric, so the averages are my calculation from tool values.	2	3
5	answered	No existing funnel (the server has no funnel list tool). Computed with run_funnel_report over 17-18 Nov: /pricing 11 users -> /contact 1 user -> /thanks 1 user (step completion rates 9.1%, 100%, 100%).	Open funnel on activeUsers, steps = page_view event + pageLocation contains the URL; the steps are ordered.	2	2
6	answered	1 file_download event for /mapleform-checklist.pdf (1 user).	GA4 file_download event with the fileName dimension.	1	4
7	answered	2 click events (2 users) with linkUrl https://www.w3.org/WAI/tutorials/forms/.	GA4 enhanced-measurement outbound click event ('click') with the linkUrl dimension.	1	4
8	not_possible	GA4 has no rage-click or dead-click data and the server has no tool for it.	n/a	0	1
9	answered	/templates (page title 'Page not found'): 3 page views, 3 active users.	screenPageViews and activeUsers for pagePath /templates.	1	5
10	answered	3 purchase events (3 transactions), purchaseRevenue/totalRevenue 24 with currency_code EUR requested. The property's native currency is USD, so I can't tell whether the figure was converted.	eventCount for purchase; purchaseRevenue in the requested currency_code. The same 24 also appeared as eventValue in the event report.	2	4

Read tools: get_account_summaries, get_property_details, get_custom_dimensions_and_metrics, list_google_ads_links, list_key_events, list_property_annotations, run_report, run_conversions_report, run_funnel_report, run_realtime_report

Write tools: none

Setup test: Create key event or custom dimension named 'MCP test: ...' → **not_supported**. The server offers no write tool, so nothing was created and no workaround was tried.

Notes: Property timezone is America/Los_Angeles, not UTC, so the period is 17-18 Nov in LA time. Funnels reject pagePath (use pageLocation). The funnel response repeats activeUsers headers (a compare-segment quirk). Revenue 24 is reported under both USD and EUR currency requests, or at least was under EUR. Top-5 sources are tied at 3 sessions. All numbers are small (26 users), so treat percentages cautiously.

LogRocket

Q	Status	Answer	Definition in this tool	Calls	Diff.
1	answered	47 unique users over 17-18 Nov (daily: 17 Nov = 45, 18 Nov = 25; 19 Nov = 0 in the bucket); 199 page views (page navigation events, 17 Nov 00:00 to 19 Nov 00:00 UTC)	Unique users = distinct LogRocket user IDs (active users); the full-range figure is deduplicated, not the sum of the daily figures. Page views = page navigation (href) events.	2	4

Q	Status	Answer	Definition in this tool	Calls	Diff.
2	partial	98 sessions by referrer. Direct/empty referrer 27. Top 5 named: linkedin.com 11, google.com 9, duckduckgo.com 8, reddit.com 8, news.ycombinator.com 7. Others: chatgpt.com 6, perplexity.ai 5, bing.com 4, producthunt ref 3, newsletter utm 2, t.co 2.	Sessions grouped by raw referrer URL. Empty referrer = no referrer, which I take to be direct. The tool says it cannot label direct and has no top-N option.	1	3
3	answered	19 sessions from France (unique users not retrieved)	Session count with country = France, 17 Nov 00:00 to 19 Nov 00:00 UTC.	1	5
4	partial	Average 34,370 ms (about 34.4 s) over 17-19 Nov. Daily: 17 Nov 30,824 ms; 18 Nov 54,500 ms; 19 Nov 31,000 ms.	Average active time on pages whose URL contains /article (timeOnPage). The tool extended the range to include 19 Nov, so it is not exactly 17-18 Nov.	1	3
5	answered	Funnel /pricing -> /contact -> /thanks: 34 -> 5 -> 5 sessions (112 sessions in the funnel scope)	Session-based ad-hoc funnel; steps are URLs containing the path, in order. 17 Nov 00:00 to 19 Nov 23:59:59 UTC. No saved funnel existed, so none was used.	1	4
6	needs_setup	No data returned (empty buckets) for a Download event or visits to /mapleform-checklist.pdf. Cannot tell 0 from not tracked.	Session count with a custom event containing 'Download', or time on a URL containing the PDF path; range 17-20 Nov.	1	3
7	not_possible	Not retrieved: the tool needs the link text or CSS selector and cannot filter clicks by destination URL; I did not guess one.	n/a	2	2
8	partial	Rage clicks: none found on /lab. Dead clicks: most is 'Duplicate form' button (main/div/button) with 9 events; '12 fields' text 1; 'Quote template / 12 fields' card 1.	Issue event counts (approximate number of affected sessions) from LogRocket issues of type rageClick/deadClick on /lab. The issues start 14 Nov, so the counts are not restricted to 17-18 Nov, and issue retention is 30 days.	1	3
9	partial	5 sessions visited a URL containing /templates (range 17-19 Nov incl.)	Session count with time on a URL containing /templates. It matches the URL, not the HTTP 404 status.	1	3
10	partial	7 sessions contain a 'Purchase' event (each session counted once). Revenue in EUR not retrieved.	Session count with custom event Purchase, 17 Nov 00:00 to 19 Nov 00:00 UTC. Not the number of events. Revenue needs a separate metric and the tool asked for the revenue property name.	2	3

Read tools: list_organizations: list orgs, list_projects: list projects of an org, use_logrocket: natural-language agent over sessions, metrics and issues, async with polling, build_metric: natural-language ad-hoc analytics (timeseries, tables, funnels, session counts), get_metric: run a saved metric by its URL, find_sessions: find sessions by natural-language filters, find_issues: list issues (exceptions, network errors, rage/dead clicks, error states), 30-day retention, get_network_entries: HAR network data for one session, watch_sessions: AI analysis of specific sessions

Write tools: none

Setup test: Create 'MCP test: contact funnel' for /pricing -> /contact -> /thanks → **not_supported**. No tool creates or saves a funnel, segment, chart or dashboard. build_metric builds only ad-hoc results. No workaround attempted.

Notes: Periods drifted in some answers (Q4, Q6, Q9 included 19 Nov; Q5 ended 19 Nov 23:59:59). Results are mostly sessions rather than visitors. Totals differ between queries (98 sessions in Q2 vs 112 in Q5). The tool sometimes asked clarifying questions instead of returning data (Q7, Q10 revenue). Custom event names cannot be listed. Responses are large because they include long session lists. Rage and dead click issue data is limited to the last 30 days and is grouped by issue, not by date.

Cloudflare

Q	Status	Answer	Definition in this tool	Calls	Diff.
1	partial	Period 2026-11-17 to 2026-11-18 selected exactly. No unique visitors available. Visits: 95 total (17 Nov: 72, 18 Nov: 23). Page views (pageload events): 196 total (17 Nov: 134, 18 Nov: 62).	Visit = Cloudflare RUM session (sum.visits); page views = count of pageload events. There is no unique-visitor metric (uniq field does not exist).	4	2
2	answered	Top 5 by visits: Direct (empty referrer) 36; www.google.com 9; www.linkedin.com 9; www.reddit.com 8; duckduckgo.com 8. Then news.ycombinator.com 7, chatgpt.com 7, www.perplexity.ai 5, www.bing.com 4, t.co 2. The site's own host (clicklab.privatrak.com) shows 101 page views and 0 visits (internal navigation). Direct is #1.	Visits (sessions) grouped by refererHost; no channel grouping, raw referrer hosts only.	1	2
3	answered	France (FR): 19 visits, 36 page views.	countryName dimension (ISO code); visits = sessions, count = page views. No unique visitors.	1	2
4	not_possible	No time-on-page or engagement metric exists for /article. It had 21 page views and 21 visits in the period. Only load-performance and Web Vitals datasets exist.	n/a	1	1
5	not_possible	No funnel feature and no per-visitor ordering. Only page views per path: /pricing 24, /contact 4, /thanks 4. These are not ordered funnel counts.	Page-load event counts per requestPath, not visitors.	1	1
6	not_possible	No download or custom event tracking; the beacon only records page loads and performance.	n/a	0	1
7	not_possible	No outbound click tracking.	n/a	0	1

Q	Status	Answer	Definition in this tool	Calls	Diff.
8	not_possible	No rage-click or dead-click data. /lab had 19 page views and 19 visits only.	n/a	0	1
9	partial	/templates: 5 page views, 0 visits in the period. No HTTP status or 404 dimension, so this is a proxy and not a confirmed 404 count.	Page-load event count for requestPath /templates.	1	3
10	not_possible	No Purchase event or revenue data. /order-complete had 7 page views, which is not a purchase count and has no revenue.	n/a	1	1

Read tools: search (query the Cloudflare OpenAPI spec with JS), execute (run JS calling the Cloudflare REST API and GraphQL; reads when using GET or GraphQL queries), docs (search Cloudflare documentation), whoami (show authenticated user or account)

Write tools: execute (same tool, with POST/PUT/PATCH/DELETE: can create, change or delete any Cloudflare resource the token allows, including RUM sites and rules, zones, workers and DNS)

Setup test: Nothing written. The only analytics-setup object I can see is the Web Analytics site (RUM site_info create/update/delete, plus RUM rules); I did not check which operations the token allows. → **skipped**. Per instructions, only read-only calls were made. In principle, execute could create RUM sites or rules named 'MCP test:...', but it could equally delete or alter anything the token covers, with no guardrails. Cloudflare Web Analytics has no goals, funnels, events or dashboards to configure.

Notes: Unique visitors are not available, so visits stand in for them. Sources are raw referrer hosts. Visits are credited to the entry page, so non-entry paths show 0 visits. Introspection errors and null types meant trial and error on field names. Introspection on the Rum types returned null. Today is 2026-11-19, and no data delay was observed for 17 and 18 Nov. Site has auto_install false and a standard beacon snippet.

Sentry

Q	Status	Answer	Definition in this tool	Calls	Diff.
1	not_possible	No visitor or page view counts available. A pageload span count over 7d returned 0 (tracing not enabled). Replays only come as lists, with no totals or per-day data.	Sentry has no visitor or page view metric. Replays are sampled sessions identified by IP only.	2	1
2	not_possible	No traffic source ranking. Only individual replay URLs, a few with utm_source=google, are visible.	n/a	1	1
3	not_possible	No country data or aggregation is available.	n/a	0	1
4	not_possible	No time on page metric. Replays show only total session duration in seconds.	n/a	0	1
5	not_possible	No funnel feature. Individual replays show URL paths visited, but there are no counts.	n/a	0	1
6	not_possible	No download tracking.	n/a	0	1
7	not_possible	No outbound click tracking.	n/a	0	1
8	partial	Rage clicks: 0 replays with rage clicks in 7d, so no element. Dead clicks: replays on /lab (17 Nov) show deadClickCount of 2 and 1, but no element-level aggregation, so the top element could not be determined.	Per-replay rage and dead click counts. Elements only appear in single replay details, which I did not fetch.	3	2
9	not_possible	No 404 page report. Replay URL search could in theory list visits but gives no counts, and I did not test it.	n/a	0	1
10	not_possible	No purchase events or revenue. Replays show visits to /order-complete only.	n/a	0	1

Read tools: find_organizations, find_projects, find_teams, find_releases, find_dsns, find_alert_rules, find_dashboards, find_monitors, find_metric_monitors, find_uptime_monitors, find_dropped_events, find_related_issues, get_* detail tools (issue, event stacktrace, breadcrumbs, trace, span, profile, replay, release, alert rule, monitors, dashboard, doc, snapshots), search_issues, search_errors, search_issue_events, search_traces, search_metrics, search_logs, search_profiles, search_replays, search_agent_conversations, search_docs, whoami, get_sentry_mcp_info, analyze_issue_with_seer

Write tools: update_issue, add_issue_note, link_issue, unlink_issue, create_project, create_team, create_dsn, create_alert_rule, create_metric_monitor, create_monitor, create_uptime_monitor, update_project, update_dsn, update_alert_rule, update_metric_monitor, update_uptime_monitor, delete_alert_rule, delete_metric_monitor, delete_monitor_environment, delete_uptime_monitor, add_team_to_project, remove_team_from_project, onboarding_status_update, submit_feedback_to_sentry_team (not called)

Setup test: none → **not_supported**. No write tool for analytics setup (goals, funnels or dashboards of analytics data). The write tools cover issue triage, alerts, monitors, projects and teams only, so none was used.

Notes: Project 'javascript' (org) has replays and 19 errors in 30d, with tracing returning 0 spans. Replay search returns lists only, with at most 100 per call. Today is 2026-11-19, so a 7d window covers 17–18 Nov but also adds other days. I did not fetch per-replay details (get_replay_details) because that can't give period totals.

Microsoft Clarity

Q	Status	Answer	Definition in this tool	Calls	Diff.
1	error	No data: server not authenticated	n/a	1	3
2	error	No data: server not authenticated	n/a	0	3
3	error	No data: server not authenticated	n/a	0	3
4	error	No data: server not authenticated	n/a	0	3
5	error	No data: server not authenticated	n/a	0	3
6	error	No data: server not authenticated	n/a	0	3
7	error	No data: server not authenticated	n/a	0	3
8	error	No data: server not authenticated	n/a	0	3
9	error	No data: server not authenticated	n/a	0	3
10	error	No data: server not authenticated	n/a	0	3

Read tools: query-analytics-dashboard: natural-language analytics query, query-documentation-resources: Clarity docs search, list-session-recordings: recordings filtered by smart events, rage/dead clicks, country, URL, list-projects: accessible projects, login-status: auth state, get-bot-activity-overview, get-bot-activity-distribution, get-bot-activity-item-trends, get-bot-activity-metric-trends: bot activity, list-ai-crawlers, get-ai-crawler-trends, list-bot-path-requests, get-scrape-to-referral-ratio, list-connected-cdn-providers: bot and crawler data, get-citation-overview, get-citation-metric-trends, get-citation-item-trends, list-citation-queries, list-citation-topics, list-top-cited-pages: AI citations, list-topic-insights, get-topic-insight-report, get-topic-insight-status, get-topic-insight-constraints: Topic Insight

Write tools: create-topic-insight-report: creates an AI Visibility topic and report, regenerate-topic-insight-report: refreshes a topic report, delete-topic-insight: deletes a topic and its reports

Setup test: Nothing attempted. No suitable analytics-setup write tool exists, and the server was not authenticated anyway. → **not_supported**. The write tools found are for Topic Insight only and need a verified AI Visibility domain.

Notes: OAuth login stayed loginPending after 4 status polls, with no error. No data token is configured. No analytics data was retrieved, and no feedback tool was called. The Clarity-reported date window could not be determined. The daily quota effect of the one failed call is unknown.

Appendix F: MCP test round 2, the eleven analytics reports as written

19 Nov afternoon, model Opus. The brief named only the site: "write me a short analytics report on 17 and 18 Nov: traffic, sources, what people did, problems, what stands out, three recommendations", every number from a tool result. Below is each report's text as the assistant returned it, without its closing JSON block. Headings are demoted by two levels; IP addresses removed. These are the assistants' words, not ours: their conclusions are discussed in chapter 7.

Report: Privatrak

Mapleform (clicklab.privatrak.com): analytics report for 17–18 Nov 2026 (UTC)

I used the Privatrak project "**Click lab**". It's the only project pages are on `https://clicklab.privatrak.com`, and its timezone is UTC. Its data starts on 15 Nov 2026.

1. Traffic

	17 Nov	18 Nov	Total
Visitors (approx.)	47	25	**72**
All events	296	107	**403**
Page views, all	140	60	**200**
Page views by people	122	53	**175**

- 25 of the 200 page views (12.5%) came from automated browsers. They are left out of "views by people".
- Traffic fell sharply from the first day to the second. Most of 17 Nov came in one hour: **100 of the day's 122 page views by people arrived between 05:00 and 06:00 UTC.** 18 Nov had a smaller peak of 24 of 53 views between 06:00 and 07:00. This looks like scripted or test traffic, not organic visits.
- Compared with 15–16 Nov, visitors went from 112 to 72 (−35.7%) and events from 732 to 403 (−44.9%). Both periods are short and look like test traffic, so I wouldn't read this as a trend.

2. Where visitors came from (72 visitors)

Source	Visitors	Share
LinkedIn	11	15.3%
Google	8	11.1%
DuckDuckGo	7	9.7%
Product Hunt	7	9.7%
Direct / unknown	6	8.3%
Hacker News	6	8.3%
Reddit	6	8.3%
Bing	5	6.9%
ChatGPT	5	6.9%
Perplexity	5	6.9%
newsletter	4	5.6%
X (Twitter)	2	2.8%

Social visitors mostly landed on `/`. Search visitors mostly landed on `/article` (Google 4, DuckDuckGo 3).

3. What visitors did

Most viewed pages (all page views): /product 35, / 34, /article 24, /pricing 24, /lab 21, /app/answers 12, /checkout 7, /order-complete 7.

Conversions

- **Purchases (/order-complete):** 7 purchases, 4 on 17 Nov and 3 on 18 Nov. That is 9.7% of the 72 visitors. Order totals add up to **56 EUR** (32 on the 17th, 24 on the 18th).
  - In the checkout funnel, 24 people visited /pricing and 7 selected a plan (29.2%). All 7 of those went on to /checkout and bought.
- **Contact form (/thanks):** 4 conversions, which is 5.6% of visitors. 4 contact forms were submitted.
  - From /pricing, 24 went on to 4 who reached /contact (16.7%), and all 4 reached /thanks.
- **PDF downloads:** 4, all of "Download the checklist (PDF, 2 KB)" on /article (3 on the 17th, 1 on the 18th).
- **Outbound clicks:** 6 (5 on the 17th, 1 on the 18th).

4. Problems on the site

- **Clicks with no effect ("dead clicks"): 15. Rapid repeated clicks ("rage clicks"): 9. Clicks followed by a JavaScript error: 3. Slow responses: 0.** These are spread over 8 elements.
- All of them happened on 17 Nov in the hour from 05:00 UTC; there were none on 18 Nov.
- Worst elements:
  - "**Duplicate form**" on /lab: 7 dead clicks and 4 rage clicks, out of 9 clicks.
  - "**Save draft**" on /lab: 2 error clicks (TypeError).
  - "**Place order**" on /checkout: 1 error click (TypeError).
  - Also on /lab, with clicks that had no effect: "Delete form", a chart graphic and the "Quote template" card.
- **404 pages:** Privatrak can't report these for this site. No 404 page, event or HTTP status is recorded.

5. What stands out

- One hour on 17 Nov carried most of the traffic, and every click problem happened in that same hour. That points to a test run.
- **/article** was the second most common landing page (21 visits started there) and kept readers for 61 s on average. Only 29.2% of its views went on to another page.
- **/pricing** is where checkout visitors drop off: only 29.2% selected a plan. Everyone who selected a plan finished the purchase.

6. Three recommendations

1. **Fix the broken controls.** Start with "Duplicate form" and the TypeError behind "Save draft" on /lab, then the TypeError after "Place order" on /checkout. After fixing each one, mark it resolved under Click problems in Privatrak so you'll see it if it happens again.
2. **Give /article readers a next step.** Add a clear link to /product or /pricing in and at the end of the article, next to the PDF checklist. Watch the share of /article views that go on to another page.
3. **Start measuring 404s and separate test traffic.** Call `window.tracker.track('Page not found', …)` from the 404 template, and have your test scripts set a trait. Then future reports can count missing pages and leave test runs out.

Saved in Privatrak as the AI review "MCP test: report 17-18 Nov", with review id `[id]`. The server automatically filed the save under change run `[id]`, which also lets you undo it. I created or changed nothing else.

Report: PostHog

Mapleform (clicklab.privatrak.com): report for 17–18 Nov 2026 (UTC)

Source: PostHog org "Privatrak", project "Default project". It is the only project in the account, and all its events in this period come from clicklab.privatrak.com. Turning on the test-account filter changed nothing, so the figures below include everyone.

Traffic

- **Total:** 41 visitors, 53 sessions and 106 pageviews. The average session lasted 289 s and the bounce rate was 3.8 %.

- **17 Nov:** 39 visitors, 40 sessions, 76 pageviews, average session 368 s, bounce rate 0 %. Most of it came in one burst: 61 pageviews from 29 visitors between 05:00 and 06:00 UTC.
- **18 Nov:** traffic fell to 14 visitors, 13 sessions and 30 pageviews. Sessions were much shorter (44 s average) and the bounce rate was 15.4 %. The busiest hour was 06:00 UTC, with 15 pageviews from 7 visitors.

Where visitors came from

These counts are visitors, by first source.

- **Channels:** Organic Social 17, Organic Search 11, Direct 10, AI 7, Email 4, Paid Search 2, Referral 1.
- **Referring sites:** direct 14, LinkedIn 7, DuckDuckGo 6, Google 5, Hacker News 4, Reddit 4, Perplexity 4, ChatGPT 3, t.co 2, Bing 2, app.privatrak.com 1.
- **Campaigns:** "Newsletter / email / November-Launch" brought 4 visitors and "google / cpc / forms-us" brought 2.
- **Product Hunt:** 5 sessions arrived with `?ref=producthunt`. PostHog does not read `ref=` as a source, so these visits are not credited to Product Hunt.

What visitors did

- **Most viewed pages (views / visitors):**
  - /product 25 / 13
  - / 23 / 22
  - /article 19 / 16
  - /pricing 12 / 11
  - /lab 11 / 11
  - /app 4 / 4
  - /search, /checkout, /order-complete and /templates 3 / 3 each
- **Contact form:** /thanks had 0 pageviews, and no contact form submission was recorded. The only forms submitted were the search form (3) and the checkout form (3).
- **Purchases:** 3 "Plan selected" events and 3 "Purchase" events, all for the Team plan at 8.0 EUR each, plus 3 views of /order-complete. The 3 buyers came via DuckDuckGo, Bing and Reddit.
- **PDF downloads:** 3 clicks by 3 people on the checklist PDF link on /article. PostHog records the click, not whether the download finished.
- **Outbound clicks:** 2 clicks by 2 people from /article to a forms tutorial on w3.org.

Problems

- **Dead clicks:** 11 by 8 people, all on /lab:
  - "Duplicate form" 6
  - "Save draft" 2
  - "Publish form" 1
  - other elements 2
- **Rage clicks:** 3 by 3 people, also all on /lab, one each on Publish form, Duplicate form and Save draft.
- **404 pages:** 3 hits by 3 people, all on /templates. The "Browse all templates" link on /product points there and was clicked 3 times.
- **Errors:** PostHog error tracking shows 0 issues and no exception events. The session recordings do show browser console errors: 18 errors in 9 of 40 recorded sessions. The messages include:
  - "Uncaught TypeError: lab: save draft failed": 2 times, in 2 sessions.
  - Amplitude "No remote config received": 11 times, in 7 sessions.
- **Missing pageviews:** people clicked through to Answers, Forms and Settings inside /app (2 clicks each), but no pageviews were recorded for those subpages.

What stands out

- **One burst made most of the traffic:** 61 of the 106 pageviews over the two days came in a single hour on 17 Nov. Day 2 was much quieter.
- **Checkout works well:** every "Plan selected" (3 of 3) became a purchase and reached /order-complete.
- **The /lab editor is the main source of frustration:** it accounts for all dead and rage clicks. The "save draft failed" error in the console suggests that button is actually broken.
- **The product page links to a missing page:** "Browse all templates" leads to the /templates 404.

Recommendations

1. **Fix the /lab editor buttons.** Start with Save draft, which throws an error, and Duplicate form, the most-clicked dead element.
2. **Fix the /templates link on /product:** publish the page, or remove or redirect the link.
3. **Fix the measurement gaps.** Track the contact form and /thanks, and record pageviews inside /app. Tag Product Hunt links with UTM parameters instead of `?ref=`. Remove or fix the failing Amplitude snippet.

Saved: I saved this report in PostHog as the notebook "MCP test: report 17-18 Nov": https://[link] I didn't create or change anything else.

Report: Mixpanel

Mapleform (clicklab.privatrak.com): analytics report for 17–18 Nov 2026

Source: Mixpanel organisation "Privatrak", project "Privatrak" , the only project in the account. Its page views carry `current_domain = clicklab.privatrak.com`. On these days every page view came from that domain, with no localhost test traffic.

On the dates: Mixpanel splits days by the project's timezone, and none of its tools would tell me what that timezone is. So I can't confirm that the days below are UTC days. This only affects the split between the two days: 1 event at 23:00 on 17 Nov and 10 events in the 00:00 hour on 18 Nov sit right at midnight. Everything else happened between 05:00 and 15:00.

Traffic

- **124 page views from 40 unique visitors** over the two days.
- **Traffic fell sharply on the second day:** 17 Nov had 95 page views from 40 visitors; 18 Nov had 29 page views from 13 visitors. All tracked events: 258 on 17 Nov, 73 on 18 Nov.
- **Activity came in short morning bursts.** On 17 Nov, 216 events fell in the 05:00 hour, 19 at 06:00, 21 at 10:00 and 1 at 14:00. On 18 Nov, 28 fell at 05:00 and 35 at 06:00.
- **Sessions aren't usable.** Mixpanel's session count came back identical to the page-view count (124), so it doesn't appear to be counting real sessions.

Where visitors came from

Initial referring domain, as page views / visitors:

Source	Page views	Visitors
Direct	38	11
google.com	20	7
duckduckgo.com	17	5
linkedin.com	14	3
perplexity.ai	10	3
reddit.com	8	3
news.ycombinator.com	8	4
chatgpt.com	6	3
bing.com	3	1

Campaign tags (UTM) were also present:

- Among direct traffic: 6 page views tagged `google`, 2 tagged `Newsletter` (2 visitors) and 1 tagged `chatgpt.com`.
- Among google.com traffic: 3 page views tagged `google`.

What visitors did

Most viewed pages (page views / visitors):

Page	Page views	Visitors
/product	26	15
/	23	20
/pricing	16	13
/article	16	14
/lab	12	12
/checkout	5	5
/order-complete	5	5

Conversions

- **Purchases:** 5 `Purchase` events from 5 buyers, 3 on 17 Nov and 2 on 18 Nov. Revenue was 40 EUR in total; every order was the Team plan at 8 EUR. These match 5 "Plan selected" events, 5 checkout form submits and 5 /order-complete views.
- **Contact form:** 1 submit on /contact, which matches the 1 /thanks view. The /contact page itself had only 1 view.
- **Other forms:** 4 more form submits on the homepage, from a form with no ID. Mixpanel doesn't say which form this is. Total form submits: 10 (7 on 17 Nov, 3 on 18 Nov).
- **PDF downloads:** 3 clicks on /mapleform-checklist.pdf by 3 visitors. These are clicks on the link; Mixpanel has no event for a completed download.
- **Outbound clicks:** 1 click to w3.org/WAI/tutorials/forms/.
- **Clicks overall:** 86 tracked clicks (70 on 17 Nov, 16 on 18 Nov).

Problems on the site

- **404 pages:** /templates showed "Page not found" 3 times, to 3 visitors. Every time, the visitor arrived from /product.
- **Dead clicks:** 32 in total (28 on 17 Nov, 4 on 18 Nov).
  - 15 were on /lab buttons that do nothing: button `#b` 11 times and `#a` 4 times.
  - Most of the rest were on links that did lead somewhere. For example, 5 were on the /pricing button to checkout, yet checkout was reached 5 times. These look like false alarms.
- **Rage clicks:** 1, on /lab button `#b`.
- **JavaScript or other errors:** not available. The project has no error event.

What stands out

- **Every 18 Nov visitor had also come on 17 Nov.** The two-day total is 40 visitors, the same as 17 Nov alone. With the tight morning bursts, this looks like scripted or test traffic rather than real visitors.
- **Buying works smoothly.** Each of the 5 checkout visits ended in an order and an /order-complete view.
- **The contact form is barely used:** 1 submit, compared with 5 purchases.
- **/lab is the main source of frustration,** with 15 dead clicks and 1 rage click on two buttons.

Recommendations

1. **Fix the /templates page or the link to it on /product.** Every visit to /templates ended on a 404.
2. **Make the /lab buttons `#a` and `#b` do something, or show that they're disabled.** They caused 15 dead clicks and the only rage click.
3. **Add tracking for errors, PDF downloads, outbound links and the homepage form.** Name the homepage form too. Also confirm the project is UTC so daily reports line up with UTC days.

Saved: I saved this as a Mixpanel dashboard named "MCP test: report 17-18 Nov" : https://[link] It holds a text summary and four charts, which Mixpanel saves as part of the dashboard. I created or changed nothing else. The queries I ran while gathering data also produced report links, but as far as I can tell those aren't saved reports.

Report: Plausible

Mapleform (clicklab.privatrak.com): 17–18 Nov 2026 (UTC)

Caveat: traffic was very low (33 visitors), so a single visitor can move any percentage a lot. Treat the trends below as signals to check, not firm conclusions.

Traffic

- **Total:** 33 visitors, 33 visits and 79 pageviews. Bounce rate was 18% and the average visit lasted 265 s.
- **How the two days compared:**

	Visitors	Pageviews	Pages/visit	Bounce	Avg. duration
17 Nov	21	53	2.52	10%	403 s
18 Nov	12	26	2.17	33%	23 s
Change	−42.86%	−50.94%	−13.89%	+23 pts	−94.29%

- **The 17th had one burst:** 14 visitors and 46 pageviews fell in a single hourly bucket, labelled 12:00. Those hour labels are in the site's own timezone, not UTC, and the server doesn't say what that timezone is.
- **Compared with 15–16 Nov:** visitors went from 36 to 33 (−8.33%), visits from 38 to 33 and pageviews from 131 to 79 (−39.69%). Pages per visit fell from 3.45 to 2.39, average duration from 514 s to 265 s, and bounce rate rose from 5% to 18%.

Where visitors came from

- **By channel:** Organic Social 10, Organic Search 8, Direct 7 (bounce 43%), AI Assistants 4, Email 2, Paid Search 1, Referral 1.
- **By source:** Direct 7, Google 5, LinkedIn 4, DuckDuckGo 3, Perplexity 3, Hacker News 2, Newsletter 2, Reddit 2, and 1 each from Bing, ChatGPT, X, app.privatrak.com and producthunt.

What visitors did

- **Most viewed pages (visitors / pageviews):** / 13/13, /article 12/11, /lab 9/9, /pricing 8/8, /product 7/12, /search 4/4, /app 3/3, /checkout 3/3, /order-complete 3/3, /templates 3/3.
- **Entry pages:** / 11 (bounce 18%), /article 10 (20%), /product 4 (0%), /app 3 (33%), /lab 2 (50%), /pricing 2 (0%). One more visit recorded no pageview at all.
- **Contact form (/thanks):** 1 visitor reached /contact and 1 reached /thanks, a conversion rate of 3.03%.
  - Plausible logged 8 "Form: Submission" events in total: 4 on /, 3 on /checkout and 1 on /contact. I can't tell from the data what the 4 homepage submissions were.
- **Purchases (/order-complete):** 3 purchases, a conversion rate of 9.09%.
  - The path was: 8 visitors on /pricing → 3 chose a plan (all "Team") → 3 reached /checkout → 3 purchases, with 3 visitors on /order-complete.
- **PDF downloads:** 3, all of `mapleform-checklist.pdf`.
- **Outbound clicks:** 4, all to the W3C forms tutorial (w3.org/WAI/tutorials/forms/).

Problems on the site

- **404s:** 3, all on **/templates**. 3 visitors opened /templates with 3 pageviews, so every visit to that page hit the 404.
- **Not available from this server:** JavaScript errors, frustrated (rage) clicks and dead clicks.
- **Data oddity:** /article shows 12 visitors but only 11 pageviews.

What stands out

- **18 Nov dropped sharply:** visitors fell by 42.86%, and the average visit fell from 403 s to 23 s.

- **Direct traffic** bounced the most, at 43%.
- **Checkout worked:** every visitor who chose a plan went on to buy (3 of 3).
- **Social, search and AI assistants** together brought 22 of the 33 visitors.

Recommendations

1. **Fix /templates.** It returned a 404 to all 3 visitors who opened it, so either restore the page or remove the links to it.
2. **Find out why engagement collapsed on 18 Nov** (23 s average visit, 33% bounce). Check for a deploy or tracking change that day, and look at the direct-traffic landing experience.
3. **Make the contact path easier to find and measure.** Only 1 visitor reached /contact. Rename or split the "Form: Submission" goal so you can tell the homepage form, the checkout form and the contact form apart. Also consider opening the W3C link in a new tab, since it took 4 visitors off the site.

Not saved: the Plausible server has no tool for storing reports, so nothing was saved and nothing was created or changed.

Report: Pirsch

Pirsch has one domain, clicklab.privatrak.com, and I have all the data I need. The report follows.

Mapleform (clicklab.privatrak.com): analytics report for 17–18 Nov 2026 (UTC)

Source: Pirsch. The domain's own timezone is Asia/Bangkok, so I ran every query with `timezone=UTC`.

Traffic

- **Both days:** 64 unique visitors, 79 sessions and 195 pageviews. The bounce rate was 38% (30 of 79 sessions).
- **17 Nov:** 43 visitors, 53 sessions, 131 views, 37.7% bounce.
- **18 Nov:** 25 visitors, 26 sessions, 64 views, 38.5% bounce. That is roughly half of the day before.
- **By hour:** traffic came in one short burst. The 05:00 UTC hour had 41 visitors and 133 views, and 06:00 had 15 visitors and 34 views. Every other hour had 5 visitors or fewer. These hourly figures cover both days combined.

Where visitors came from

Source	Visitors	Bounce rate
LinkedIn	10	20%
Google	9	60%
Direct (no referrer)	8	62.5%
DuckDuckGo	7	29%
Hacker News	7	43%
Reddit	7	14%
Product Hunt	7	29%
ChatGPT	6	50%
Newsletter	5	40%
Perplexity	5	20%
Bing	4	50%
Twitter/t.co, app.privatrak.com, "google" (UTM)	1 each	n/a

- **Countries:** US 17, GB 14, DE 13, FR 12, SG 6, AU 1, TH 1.
- **Devices:** 55 desktop and 9 mobile visitors.

What visitors did

- **Most viewed pages (visitors / views):**
  - / : 30 / 31
  - /pricing: 23 / 24
  - /product: 22 / 35

  - /article: 20 / 22
  - /lab: 18 / 18
  - /app, /checkout and /order-complete: 7 / 7 each

- **Purchases (/order-complete):** 7 visitors, 4 on 17 Nov and 3 on 18 Nov. All 7 were the "Team" plan at 8 each, for 56 in revenue. Pirsch doesn't report the currency. 7 visitors used "Plan selected", and the path went /pricing (23) → /checkout (7) → /order-complete (7).
- **Contact form (/thanks):** 4 visitors, 3 on 17 Nov and 1 on 18 Nov. /contact also had 4 visitors.
- **PDF downloads:** 3, all of /mapleform-checklist.pdf and all on 17 Nov.
- **Outbound clicks:** 6, all to https://www.w3.org/WAI/tutorials/forms/. There were 4 on 17 Nov and 2 on 18 Nov.

Problems

- **404s:** 5 "404 Page Not Found" events from 5 visitors, all for **/templates**. /templates also shows 5 visitors in the page report, so every visitor to /templates hit the 404. There were 3 on 17 Nov and 2 on 18 Nov.
- **/article:** 77% bounce rate (17 of 22 sessions). It is the second most common entry page (22 entries).
- **JS errors, frustrated clicks, dead clicks:** Pirsch doesn't record these, so the report can't cover them.

What stands out

- **Purchase conversion:** everyone who reached /checkout finished the purchase (7 of 7).
- **Plan mix:** every purchase was the Team plan.
- **/templates is broken:** it is linked from somewhere but returns a 404.
- **Search traffic bounces most:** Google visitors bounced 60% of the time and direct visitors 62.5%. Reddit (14%), LinkedIn (20%) and Perplexity (20%) brought visitors who stayed longer.
- **Traffic was a burst, not steady:** most visits fell in the 05–06 UTC hours, and 18 Nov had about half the visitors of 17 Nov.

Recommendations

1. **Fix /templates.** Restore the page, or redirect it and remove the link that points to it. Then check that the "404 Page Not Found" event stops firing.
2. **Fix the /article landing page.** It loses 17 of 22 sessions. Add a clear next step, such as a link to /product or /pricing, or a CTA for the checklist PDF. Check what Google searchers land on, since that source bounces at 60%.
3. **Get more visitors from /pricing to /checkout.** That is the weak step (23 → 7), while checkout itself converted 7 of 7. Test the other plans' presentation and the pricing CTA, and put more effort into the sources that engage best (LinkedIn, Reddit, Perplexity).

Limits: these are small numbers over two days, so treat the percentages as signals, not trends. Pirsch has no tool for saving reports, so I didn't save this one and didn't change anything.

Report: Matomo Cloud

Mapleform (clicklab.privatrak.com): analytics report for 17–18 Nov 2026 (UTC)

Source: Matomo site ID 1, "privatrak.com.", main URL https://clicklab.privatrak.com. The site's timezone is UTC, so the calendar days match your request.

1. Traffic

	17 Nov (Tue)	18 Nov (Wed)	Both days
Visits	42	7	**49**
Unique visitors	39	7	(no deduplicated figure available)
Actions	98	19	117
Actions per visit	2.3	2.7	2.4
Avg. visit duration	6 min 18 s	32 s	5 min 28 s
Bounce rate	43%	14%	39%

There were 103 pageviews in total. Traffic fell sharply from 42 visits on 17 Nov to 7 on 18 Nov. The few visitors on the 18th bounced less (14%) but stayed much shorter (32 s).

2. Where visitors came from

- **Social networks: 17 visits (34.7%).** LinkedIn 7, Hacker News 5, reddit 5. On 18 Nov, 5 of the 7 visits came from social.
- **Search engines: 13 visits (26.5%).** No keywords were passed. This channel brought €24 of the €32 revenue (75%).
- **Direct: 7 visits (14.3%).**
- **AI assistants: 6 visits (12.2%).** ChatGPT 3 (all bounced), Perplexity 3 (0% bounce, avg. 11 min 44 s).
- **Campaigns: 6 visits (12.2%).** "November-Launch" (Newsletter/email) 4 and "forms-us" (google/cpc) 2. All 6 bounced, with 0 s on site. All 6 came on 17 Nov; there were none on 18 Nov.
- Product Hunt links (`?ref=producthunt`) brought 6 entrances (3 on `/`, 2 on `/product`, 1 on `/article`). None bounced.

3. What visitors did

Most viewed pages: `/` 19, `/article` 14, `/lab` 14, `/pricing` 14, `/product` 12. By page title, the product tour has 22 views across all `/product` variants.

Conversions: 12 conversions in 8 visits, a 16.33% visit conversion rate. 9 were on 17 Nov and 3 on 18 Nov.

- **Contact form → /thanks:** 1 conversion (goal "Visit /thanks"). `/thanks` had 1 pageview. Form analytics showed the contact form with 1 viewer, 1 starter and 1 submitter.
- **Purchases → /order-complete:** 4 orders worth €32 (3 orders/€24 on 17 Nov, 1 order/€8 on 18 Nov), €8 average order. `/order-complete` had 4 pageviews. The "Plan selected" goal had 4 conversions, and `/checkout?plan=team` had 4 views. Every plan selection ended in an order.
- **PDF downloads:** 2, both `mapleform-checklist.pdf`.
- **Outbound clicks:** 1, to w3.org/WAI/tutorials/forms/.

4. Problems on the site

- **JavaScript errors:** 3 errors in 3 visits (6.12% of visits), 2 distinct ones:
  - "lab: save draft failed": 2 times on `/lab` (14% of `/lab` pageviews).
  - "Load failed (eu01.rec.mouseflow.com)": 1 time, on `/checkout?plan=team` (25% of checkout pageviews).
- **404 pages:** 2 views with the title "Page not found". `/templates` also had exactly 2 views with the same average time (8 min 38 s), so it is very likely the broken URL. Matomo does not link the two directly.
- **`/app`:** 4 entrances, all bounced, 0 s on page.
- **Frustrated or dead clicks:** Matomo does not report these. There are active heatmaps for `/`, `/lab` and `/pricing`, but they don't classify clicks as dead or frustrated.

5. What stands out

- Social traffic made up 17 of 49 visits but brought only €8. Search sent 13 visits and €24.
- Both paid and newsletter campaign visits (6) all bounced at 0 s. Separately, `/app` had 4 bounce-only entrances. I couldn't check whether these are the same visits, because this Matomo setup doesn't allow ad-hoc segments.
- `/article` is the second most common landing page (12 entrances), but 67% of those visits bounce and 79% of its views end the visit.
- Checkout works once people reach it: 4 plan selections and 4 orders. The upper part of the funnel is the weak spot.

6. Recommendations

1. **Fix the `/lab` "save draft failed" error,** which hit 2 of 14 lab views. Also check the Mouseflow script that failed on checkout, or load it in a way that can't affect the checkout page.
2. **Fix the broken landing pages.** Publish or redirect `/templates` (2 × 404). Check the destination URLs of the November-Launch newsletter and the forms-us Google Ads campaign, plus `/app`: 6 campaign visits and 4 `/app` entrances all bounced in 0 s.

3. **Give `/article` a next step.** Add a clear link to the checklist PDF and to `/pricing` or `/product`. It gets 12 entrances but loses 67% of them right away.

Not saved: this server has nowhere to store a written report or analysis. The only options are a scheduled email report (a recurring mail-out, not this text) and a chart annotation. Both would create something you didn't ask for, so I saved nothing. I also left the existing goal "MCP test: thanks page" (ID 5) untouched. It had no conversions in this period.

Report: Google Analytics 4

Mapleform (clicklab.privatrak.com): analytics report for 17–18 Nov 2026 (UTC)

Source: Google Analytics account "Privatrak", property "Click lab" . This is the only property on the account.

Time window: The property reports in America/Los_Angeles time, which is UTC−8 in November. To get the two UTC days, I filtered hourly data from 16 Nov 16:00 to 18 Nov 15:59 Los Angeles time. That equals 17 Nov 00:00 to 18 Nov 23:59 UTC.

1. Traffic

	17 Nov	18 Nov	Both days
Sessions	47	27	70
Active users	45	25	49
New users	45	4	49
Page views	123	56	179
Key events	12	7	19
Engagement rate	89.4%	77.8%	84.3%
Bounce rate	10.6%	22.2%	15.7%
Avg. session duration	500 s	220 s	421 s

Some sessions and users were active on both days, so the daily figures add up to more than the two-day totals.

How it developed: Traffic fell off after the first day. Much of 17 Nov came from one hour: 05:00–06:00 UTC on 17 Nov had 33 sessions, 99 page views and 33 first visits. That is more than half of all page views in the period. On 18 Nov traffic was lower and spread more evenly. Its busiest hours were 05:00 UTC (11 sessions) and 06:00 UTC (9 sessions).

2. Where visitors came from (sessions, both days)

- **Organic Social: 24 sessions.** LinkedIn 10, Hacker News 6, Reddit 6, t.co 2.
- **Organic Search: 16 sessions.** DuckDuckGo 7, Google 6, Bing 3.
- **Direct: 12 sessions.**
- **AI Assistant: 10 sessions.** ChatGPT 5, Perplexity 5.
- **Email (Newsletter): 5 sessions.**
- **Paid Search (google / cpc): 2 sessions.**
- **Unassigned: 1 session.**

Organic Search produced the most key events (8). LinkedIn sent 10 sessions but produced **0** key events. On 18 Nov, Organic Social was the largest channel, with 13 of 27 sessions when counted per hour.

3. What visitors did

Most viewed pages (views, both days):

- /product: 36
- /: 33
- /pricing: 25
- /article: 21
- /lab: 17 (all of them in the 05:00 UTC hour on 17 Nov)
- /app: 7

- /checkout: 7
- /order-complete: 7

Top landing pages:

- / had 29 sessions.
- /article had 18 sessions.
- /pricing had 7 sessions, which produced 10 key events.
- /app had 6 sessions with a 66.7% bounce rate.

Conversions:

- **Purchases:** 5 purchase events and 5 transactions: 3 on 17 Nov, 2 on 18 Nov. All were the "Team" plan. Revenue was **$44.09**: $26.46 on 17 Nov and $17.64 on 18 Nov, at $8.82 per order. However, /order-complete was viewed 7 times by 7 users (4 + 3), and /checkout was also viewed 7 times.
- **Contact form:** 4 `contact_sent` events (3 + 1). This matches 4 views of /thanks and 4 views of /contact.
- **Plan selections:** 5 `plan_selected` events (3 + 2).
- **PDF downloads:** 2 downloads of /mapleform-checklist.pdf, both from /article, both on 17 Nov.
- **Outbound clicks:** 3, all to w3.org/WAI/tutorials/forms/ from /article (1 on 17 Nov, 2 on 18 Nov).

4. Problems on the site

- **404 page:** /templates shows the title "Page not found". It had 5 views from 5 users (3 on 17 Nov, 2 on 18 Nov). **All 5 came from /product**, so a link on the product tour points to a page that doesn't exist.
- **JavaScript errors, frustrated (rage) clicks and dead clicks:** this server can't provide them. Google Analytics doesn't record them, and the property has no events for them.

5. What stands out

1. **One burst of traffic in a single hour.** At 05:00 UTC on 17 Nov there were 33 brand-new visitors arriving through six channels at once. All 17 /lab views also happened in that hour. That pattern looks more like scripted or test traffic than real visitors, and it inflates the 17 Nov numbers and the drop on 18 Nov.
2. **Two purchases may not be recorded.** There were 7 order-confirmation views from 7 users but only 5 purchase events. This could be a tracking gap.
3. **/pricing works well as an entry page.** 7 sessions started there and produced 10 key events.
4. **LinkedIn traffic doesn't convert.** It sent 10 sessions and produced 0 key events.
5. **People who start in /app often leave.** 66.7% of the 6 sessions that started on /app bounced.

6. Recommendations

1. **Fix the /templates link on /product.** Either remove it, point it somewhere valid, or build the page. Every visit to /templates in the period came from that link.
2. **Check that the purchase event fires on every order.** Compare the 7 /order-complete views with the 5 recorded purchases (for example, look for double reloads or the tag firing before the page has loaded). Also confirm the currency settings, since each order shows an odd amount ($8.82).
3. **Exclude test traffic and add error tracking.** Filter out internal or scripted traffic so bursts like the 05:00 UTC one don't distort the numbers. If you want error, rage-click and dead-click data, send it as GA events or use a dedicated tool, because the current setup can't report it.

Not saved: this Google Analytics server has no tool for saving reports or analyses, so nothing was saved and nothing in the property was changed.

Report: LogRocket

Mapleform (clicklab.privatrak.com): analytics report for 17–18 Nov 2026 (UTC)

Source: LogRocket, organization "privatrak", project "test". It is the only project in the account. Every URL it recorded is on clicklab.privatrak.com, so this is your site.

1. Traffic

- **98 sessions from 47 unique users.** All users are anonymous.
- **17 Nov: 73 sessions. 18 Nov: 25 sessions.**
- Traffic came in bursts, not spread across the day:
  - **17 Nov:** 59 sessions between 05:00 and 06:00 UTC, then 5 at 06:00, 4 at 10:00, 2 at 14:00 and 3 at 23:00.
  - **18 Nov:** 4 at 00:00, 10 at 05:00, 9 at 06:00, and 1 each at 11:00 and 17:00.
- In most other hours there were no sessions.

2. Where visitors came from

By referrer:

- No referrer (direct): 27
- LinkedIn: 11
- Google: 9
- DuckDuckGo: 8
- Reddit: 8
- Hacker News: 7
- ChatGPT: 6
- Perplexity: 5
- Bing: 4
- t.co (X/Twitter): 2
- app.privatrak.com: 1
- Your own site's pages as referrer: 10

Campaign landing URLs (sessions):

- Homepage with `?ref=producthunt`: 3
- Homepage with `utm_source=chatgpt.com`: 3
- Newsletter "November-Launch" link to /article: 3
- Newsletter "November-Launch" link to the homepage: 2

By country:

- United States: 29
- Germany: 20
- France: 19
- United Kingdom: 19
- Singapore: 10
- Thailand: 1

3. What visitors did

Most visited pages (sessions that visited the page; LogRocket gives no pageview counts):

- / : 25
- /pricing: 24
- /lab: 20
- /product: 20
- /article: 15
- /checkout?plan=team: 7
- /order-complete: 7
- /app/answers, /app/forms, /app/settings, /product?id=booking and /product?id=quote: 6 each
- /templates: 5

Conversions:

- **Contact form:** 4 sessions visited /contact and 4 reached /thanks. That is about 4% of the 98 sessions.
- **Purchases:** 7 sessions visited /checkout?plan=team and 7 reached /order-complete. That is about 7% of sessions.
- **PDF downloads:** 3 sessions clicked "Download the checklist (PDF, 2 KB)", all on 17 Nov. LogRocket can't tell whether the file actually downloaded. It also flagged this link as a *dead click*: a click that produced no visible effect.
- **Outbound clicks:** not available. LogRocket can't identify clicks to other domains.

4. Problems on the site

- **Rage clicks:** 0 sessions.
- **Dead clicks:** 13 sessions, all on 17 Nov. 11 of them started on /lab and 2 on /article.
- **JavaScript errors:** 3 sessions, all on 17 Nov between 05:26 and 05:28 UTC.

Issues LogRocket has open: the counts below cover each issue's whole history (back to 14–16 Nov), not just these two days.

- **On /lab:**
  - The "Duplicate form" button does nothing when clicked (9 events, last seen 17 Nov).
  - An error "lab: save draft failed" (2 events).
  - Clicks on "12 fields" and the "Quote template" card do nothing (1 event each).
- **On /article:** the PDF checklist link does nothing when clicked (2 events, last seen 17 Nov).
- **Failed network requests:**
  - To Amplitude's config server: 73 events, last seen 18 Nov.
  - To api.privatrak.com/api/config: 8 events.
  - To Umami (your analytics tool), returning error 500 on /app/forms: 6 events, all on 17 Nov.
  - To Mixpanel: 2 events.
  - To Mouseflow on the checkout page: 1 failed request and 1 related error.
- **404 pages:** not available. LogRocket can't detect "page not found" pages after the fact, and none of the 34 recorded URLs looks like an error page.

5. What stands out

- **About 60% of all traffic (59 of 98 sessions) arrived in one hour,** 17 Nov 05:00–06:00 UTC. The 10 Singapore sessions all came from one IP address within a few minutes. This looks like test or automated traffic rather than real visitors.
- **Visitors are interested in buying:** /pricing (24 sessions) was almost as busy as the homepage (25). Everyone who reached checkout completed it (7 of 7).
- **The PDF lead magnet may be broken.** Every recorded click on it looks like a dead click.
- **Traffic is spread across many sources.** LinkedIn, Hacker News, Reddit and AI assistants (ChatGPT and Perplexity together: 11) each bring a meaningful share.

6. Recommendations

1. **Fix the broken interactions on /lab and /article.** That means the "Duplicate form" button, the "save draft failed" error, and the PDF checklist link. Then check in the session replays that clicks have an effect.
2. **Make your key actions measurable.** Add custom events for PDF downloads and outbound clicks, and give your 404 page its own URL or title. Then build a /pricing → /checkout → /order-complete funnel so conversion can be tracked over time.
3. **Separate test traffic and clean up tracking noise.** Exclude or tag the burst traffic (the 05:00 UTC hours, the Singapore IP). Also review the failing analytics scripts (Amplitude, Mixpanel, Umami, Mouseflow), and remove the ones you don't need.

Not saved: the LogRocket server has no tool for saving reports, so this report wasn't stored. The 404-tracking metric LogRocket suggested along the way is only a draft link; I didn't save it and changed nothing else.

Report: Cloudflare

Mapleform (clicklab.privatrak.com): analytics report for 17–18 Nov 2026 (UTC)

Source: Cloudflare Web Analytics, site tag [id]8636`, created 14 Nov 2026. The data is not sampled (sample interval 1). This tool counts page loads (page views) and "visits", meaning page loads that arrive from outside the site. It does not count unique visitors.

Traffic and how it developed

- **Both days together:** 196 page views and 95 visits.
- **17 Nov:** 134 page views and 72 visits.
- **18 Nov:** 62 page views and 23 visits. Page views fell by about 54% and visits by about 68% from the day before.
- **One burst made up most of 17 Nov.** The hour from 05:00 to 06:00 UTC had 111 of that day's 134 page views and 58 of its 72 visits. Within that hour there were page views almost every minute from 05:08 to 05:42 and again from 05:57 to 05:59. On 18 Nov, traffic was again concentrated early, with 46 of 62 page views between 05:00 and 07:00 UTC. The rest of both days was close to zero.

Where visitors came from (visits, both days)

Source	Visits
Direct / no referrer	36
google.com	9
linkedin.com	9
reddit.com	8
duckduckgo.com	8
news.ycombinator.com	7
chatgpt.com	7
perplexity.ai	5
bing.com	4
t.co	2

- **Direct traffic dropped sharply.** It went from 32 visits on 17 Nov to 4 on 18 Nov. LinkedIn (5 → 4), Reddit (5 → 3) and ChatGPT (4 → 3) held roughly steady.
- **Countries (page views):** US 52, GB 43, FR 36, DE 36, SG 29.
- **Devices (page views):** desktop 149, mobile 47.

What visitors did

Most viewed pages:

Page	Page views
/product	36
/	33
/pricing	24
/article	21
/lab	19
/app/answers	12

Conversions. These are page views of the confirmation pages, not counts of unique conversions:

- **Purchases:** /checkout had 7 page views and /order-complete had 7 (4 on 17 Nov, 3 on 18 Nov).
- **Contact form:** /contact had 4 page views and /thanks had 4 (3 on 17 Nov, 1 on 18 Nov).
- **PDF downloads and outbound clicks:** not available. Cloudflare Web Analytics only records page loads, not clicks or downloads.

Problems on the site

- **Errors, 404 pages, frustrated clicks and dead clicks:** not available. The account has no Cloudflare zones, so there are no HTTP status codes. The analytics beacon doesn't record JavaScript errors or clicks. No 404-style path appears in the page list.
- **Speed is the problem the data does show:**
  - Page load time: average 6.80 s, median 4.18 s, and 11.37 s at the 75th percentile (p75).
  - Largest Contentful Paint (LCP, how long the main content takes to appear): p75 is 3.79 s. 33 of 153 measurements were rated "poor", 23 "needs improvement" and 97 "good".
  - Slowest pages by p75 load time: / at 13.70 s, /lab at 13.41 s and /article at 12.05 s.
  - Worst pages by LCP: /article had 8 of 16 page loads rated poor, and /lab had 5 of 9.
  - Responsiveness and layout stability are fine: Interaction to Next Paint p75 is 56 ms, and Cumulative Layout Shift p75 is 0 (0 poor out of 85).

What stands out

1. **Most traffic came in one early-morning burst.** Most of 17 Nov happened between 05:00 and 06:00 UTC: a steady rate of page views per minute, all five countries, mostly desktop, and largely direct. That pattern looks like scripted or test traffic. It's an inference, and the data can't confirm it. Without that hour, the two days look much more alike.
2. **Every checkout reached the confirmation page.** /checkout and /order-complete both had 7 page views, and /contact and /thanks both had 4. The numbers are very small.
3. **The pages people enter on are the slowest.** /, /article and /lab are the slowest pages and also the ones external visitors mostly arrive on.

Three recommendations

1. **Speed up /, /article and /lab.** Their p75 load times are 12–14 s, and half of /article's LCP measurements were poor. Compress or lazy-load the main image and defer heavy scripts on these pages.
2. **Add tracking for what Cloudflare can't see.** That means form submits, PDF downloads, outbound clicks and JavaScript errors, either through an event-capable analytics tool or Zaraz. You could also proxy the domain through a Cloudflare zone so 404 and 5xx status codes become visible.
3. **Separate test traffic from real visitors.** Find out what caused the 17 Nov 05:00 UTC burst and filter it out, for example by IP or user agent. After that, build on the referral sources that held up on 18 Nov: LinkedIn, Reddit and AI assistants (ChatGPT and Perplexity).

Not saved: Cloudflare has no feature for storing reports or analyses, so nothing was created or changed.

Report: Sentry

Mapleform (clicklab.privatrak.com): analytics report for 17–18 Nov 2026 (UTC)

Source: Sentry org (region de.sentry.io), project. This is the only project in the org, and its error events come from `https://clicklab.privatrak.com/…`. Sentry is an error-monitoring tool, not a web-analytics tool. The only traffic signal it has is **Session Replay**, so all traffic numbers below are **recorded replay sessions**. They are not pageviews or unique visitors. I couldn't see the replay sample rate, so the real traffic may be higher. Performance tracing, logs and metrics returned **no data** for this project.

Traffic and how it developed

- **78 recorded sessions** in total: **62 on 17 Nov** and **16 on 18 Nov**. I counted these one by one from the replay lists.
- Traffic is very bursty. On 17 Nov, **50 of 62 sessions started between 05:00 and 05:59 UTC**. The rest of that day was 5 sessions at 06:xx, 4 at 10:xx, 1 at 14:xx and 2 at 23:xx. On 18 Nov: 2 at 00:xx, 6 at 05:xx, 7 at 06:xx and 1 at 11:xx.
- I counted **33 distinct IP addresses on 17 Nov and 12 on 18 Nov**, with 2 appearing on both days. One IP ([IP address removed]) recorded 9 sessions on 17 Nov.

Where visitors came from

These come from the UTM/ref tags on landing URLs. Sentry doesn't record the HTTP referrer, so untagged sessions can't be split into direct, search and so on.

- Product Hunt (`ref=producthunt`): **6**
- Newsletter (`utm_campaign=November-Launch`): **4**
- ChatGPT (`utm_source=chatgpt.com`): **4**
- Google CPC (`utm_campaign=forms-us`): **3**
- Untagged: **61**

What visitors did

Most visited pages, counted as sessions that visited the page:

- `/`: 26
- `/article`: 20
- `/product`: 19
- `/pricing`: 17
- `/lab`: 14 (all on 17 Nov, 05:27–05:37)
- `/checkout`: 5
- `/order-complete`: 4
- `/search`: 4
- `/app`: 4
- `/templates`: 3
- `/contact`: 1

Conversions:

- **Purchases: 4** sessions reached `/order-complete` (3 on 17 Nov, 1 on 18 Nov), out of **5** that reached `/checkout`.
- **Contact form: 0** sessions reached `/thanks`. The one `/contact` visitor typed into the name, email and message fields but never submitted.
- **PDF downloads and outbound clicks:** Sentry doesn't track these, so I can't report them.

Problems

- **Errors: 3 error events, all on 17 Nov** (05:27–05:28 UTC) and none on 18 Nov.
  - **2** were `TypeError: lab: save draft failed` on `/lab` (JAVASCRIPT-2, 2 users). Over the last 7 days this issue has 10 events and 10 users.
  - **1** was `TypeError: Load failed (eu01.rec.mouseflow.com)` on `/checkout` (JAVASCRIPT-3). That session still completed its order.
- **Dead clicks: 3 sessions** had them, all on 17 Nov.
  - **2** were on `/lab`, on `button#b` ("no response after 7.0s"). One session had 2 dead clicks, the other 1.
  - **1** was on a link inside the `/article` body.
- **Rage clicks: 0**.
- **404 pages:** none found. A search for 404/"not found" errors came back empty, but Sentry doesn't log 404 responses as page data, so this isn't conclusive.

What stands out

- Nearly all of 17 Nov's traffic came in one hour, and `/lab` got 14 sessions in about 10 minutes. The landing URLs also carry fragments that look like scenario tags (e.g. `#r=r4-d1-p09-lab-B-nothing-threeSlow`, `#r=r4-d1-p06-contact`), so much of this traffic looks scripted or synthetic, not organic.
- One session on 18 Nov landed with `#st-picker=…app.privatrak.com&mode=click-map`. That is probably your own click-map tooling and should be excluded from visitor counts.
- The checkout funnel works (4 of 5 checkout sessions completed), but the contact form produced no conversion.

Recommendations

1. **Fix `/lab`:** the "save draft" error (JAVASCRIPT-2) and the unresponsive `button#b`, which got dead clicks after a 7 s wait.
2. **Check the contact form's submit path.** The one visitor who filled every field never reached `/thanks`. Also check the link in the `/article` body that drew a dead click, which may be the download link.
3. **Add a real analytics source** for pageviews, referrers, downloads and outbound clicks, and filter out internal/scripted sessions. Sentry can't provide those numbers. The Mouseflow script also fails to load on `/checkout`.

Sentry has no tool to store reports, so **nothing was saved**. I created or changed nothing.

Report: Microsoft Clarity

Mapleform (clicklab.privatrak.com): report for 17–18 Nov 2026

Data source: I only used the Clarity server, which has one project: "Test", hostname clicklab.privatrak.com. The dashboard tool could only return its 3-day window (17–19 Nov). It broke the figures down by day, so I used only the 17 and 18 Nov rows and ignored 19 Nov. Clarity didn't say which timezone it uses for those days, so I can't confirm they match UTC. The session-recording filters did use exact UTC dates.

1. Traffic

	17 Nov	18 Nov
Sessions	76	36
Users	74	36
Page views	88	40

Across the two days there were **112 sessions and 128 page views** (my sums). Traffic fell by about half from day one to day two: sessions dropped 53% and page views 55% (my calculation). Visitors viewed only about one page per session on both days. I can't give a combined user count, because adding the two days would count returning users twice.

2. Where visitors came from

I only have sources for **17 Nov**, because Clarity cut the list off after the top 10 rows:

- clicklab.privatrak.com, labelled "Direct": **25** sessions. This is the site's own domain counted as a source.
- Direct / Other: **17**
- reddit.com: **10**
- chatgpt.com: **8**. Clarity labels this "Other", not as an AI channel.
- Google organic: **6**
- duckduckgo.com: **4**
- news.ycombinator.com: **4**
- Newsletter (email): **2**
- Google paid: **2**
- linkedin.com: **2**

These rows add up to 80, which is more than the 76 sessions that day, so some sessions seem to be counted under more than one source. **I have no source breakdown for 18 Nov.**

3. What visitors did

Most viewed pages over both days (page views, 17 + 18 Nov): /product 24 (12+12), / 22 (13+9), /pricing 17 (11+6), /article 16 (15+1), /lab 13 (13+0). After that come /checkout 6, /app/answers 6, /order-complete 5, /templates 4, /app 4, /search 3, /app/forms 3 and /app/settings 3. The page rows add up exactly to each day's total (88 and 40), so the list is complete.

Conversions:

- **Contact form:** /contact had 1 view and /thanks had 1 view, both on 17 Nov. Neither page had any views on 18 Nov.
- **Purchases:** /order-complete had 5 views (3 on 17 Nov, 2 on 18 Nov), against 6 views of /checkout (4 + 2). These are page views, not distinct orders.
- **PDF downloads:** no sessions had a "Download" event, and no PDF URL appears among the pages. I can't tell whether that means no downloads happened or whether Clarity just doesn't record them.
- **Outbound clicks:** 3 sessions, all on 17 Nov, and all clicked the "forms tutorial" link on /article. There were none on 18 Nov.

4. Problems

	17 Nov	18 Nov
Dead clicks	5	0
Rage clicks	0	0
Quick-back clicks	4	3
Excessive scrolling	0	0
Error clicks	3	0
JavaScript errors	3	0

- **JavaScript errors:** the recordings show 1 session with JavaScript errors. In it, the visitor clicked "**Save draft" on /lab 3 times** in the same second.
- **Dead clicks:** the recordings show 2 sessions with dead clicks, both on **/lab**. One was on "Open pricing in a new tab"; the other was on an element with no text. That accounts for only 2 of the 5 dead clicks the dashboard reports, and I can't find the other 3.
- **404 pages:** Clarity can't report these.

5. What stands out

- **17 Nov was a peak day.** Traffic came from Reddit, ChatGPT and Hacker News, and /lab (13 views) and /article (15 views) were busy. On 18 Nov /lab got no views and /article got 1.
- **Almost all the problems are on /lab:** every JavaScript error and every dead click I could trace was there.
- **Your own domain is the biggest single "source"** (25 sessions). That suggests internal navigation is being counted as new referrals.
- **The site loads slowly.** In the 6 recorded sessions I looked at, the first page took between **6.9 and 13.1 seconds** to load. This is a small sample.

6. Recommendations

1. **Fix /lab first.** Fix the "Save draft" button that throws errors, and the "Open pricing in a new tab" control that does nothing when clicked.
2. **Make the pages load faster,** starting with /lab, /product and /article. Load times of 7–13 seconds will cost visitors, especially the ones arriving from Reddit and Hacker News.
3. **Fix the tracking before the next campaign:**
   - Stop your own domain from showing up as a referrer.
   - Set up Clarity events for PDF downloads and for reaching /thanks and /order-complete.
   - Tag the 404 page so it can be counted.

Not saved: the Clarity server has no way to store reports, so I didn't save this one. I also didn't create or change anything in your account.

Appendix G: Read-out of every day through the MCP servers

20 Nov 2026, one headless assistant (Claude Code, Opus) per server, read-only, one brief for all servers: windows W1 15 Nov, W2 16 Nov, W3 17-18 Nov, W4 19 Nov, W5 20 Nov (to the read time, ~11:40 UTC), W6 17-20 Nov. Below is each window's metric object as the assistant returned it in its closing JSON (keys are the assistant's own; nested objects shortened to their first entries). IP addresses removed.

Privatrak

Window	Window used	Metrics
W1	2026-11-15 00:00-24:00 UTC (project UTC)	{visitors: 62, visitors_attributed: 47, visitors_unattributed_no_pageview: 15, visits_flow: 47, pageviews: 145, pageviews_people: 128, pageviews_automated: 17, events_total: 299, events_by_type: {pageview: 145, click: 106, form_submit: 11, custom: 8, dead_click: 15, rage_click: 10, error_click: 4}, sources: {Google: 7, Direct or unknown: 6, DuckDuckGo: 5, Product Hunt: 5, Hacker News: 4, LinkedIn: 4, Perplexity: 4, ChatGPT: 3, newsletter: 3, Reddit: 3, Bing: 2, X: 1}, direct_rank: 2, campaigns: [{campaign: November-Launch, source: newsletter, medium: email, visitors: 3}, {campaign: forms-us, source: google, medium: cpc, visitors: 1}, {campaign: , source: producthunt, medium: , visitors: 5}, {campaign: , source: chatgpt.com, medium: , visitors: 3}], …}
W2	2026-11-16 00:00-24:00 UTC	{visitors: 50, visits_flow: 52, pageviews: 208, pageviews_people: 191, pageviews_automated: 17, events_total: 433, events_by_type: {pageview: 208, click: 145, form_submit: 22, custom: 20, dead_click: 18, rage_click: 13, error_click: 7}, sources: {Google: 8, newsletter: 7, Direct or unknown: 5, DuckDuckGo: 5, Product Hunt: 5, Hacker News: 4, LinkedIn: 4, Perplexity: 4, ChatGPT: 3, Reddit: 3, Bing: 1, X: 1}, direct_rank: 3, campaigns: [{campaign: November-Launch, source: newsletter, medium: email, visitors: 7}, {campaign: forms-us, source: google, medium: cpc, visitors: 1}, {campaign: , source: producthunt, medium: , visitors: 5}, {campaign: , source: chatgpt.com, medium: , visitors: 3}], top_pages: {/: 30, /pricing: 26, /product: 26, /lab: 25, /article: 20, /app/answers: 14, /checkout: 11, /order-complete: 11, /app: 7, /app/forms: 7, /app/settings: 7, /contact: 6, …}, entry_pages_visits: {/: 20, /article: 11, /pricing: 10, /product: 6, /app: 3, /lab: 2}, …}
W3	2026-11-17 00:00 to 2026-11-18 24:00 UTC	{visitors: 72, visitors_per_day: {2026-11-17: 47, 2026-11-18: 25}, visits_flow: 72, pageviews: 200, pageviews_per_day: {2026-11-17: 140, 2026-11-18: 60}, pageviews_people: 175, pageviews_automated: 25, events_total: 403, events_per_day: {2026-11-17: 296, 2026-11-18: 107}, events_by_type: {pageview: 200, click: 145, form_submit: 17, custom: 14, dead_click: 15, rage_click: 9, error_click: 3}, sources: {LinkedIn: 11, Google: 8, DuckDuckGo: 7, Product Hunt: 7, Direct or unknown: 6, Hacker News: 6, Reddit: 6, Bing: 5, ChatGPT: 5, Perplexity: 5, newsletter: 4, X: 2}, direct_rank: 5, …}
W4	2026-11-19 00:00-24:00 UTC	{visitors: 13, visits_flow: 13, pageviews: 43, pageviews_people: 34, pageviews_automated: 9, events_total: 82, events_by_type: {pageview: 43, click: 30, form_submit: 4, custom: 5, dead_click: 0, rage_click: 0, error_click: 0}, sources: {Direct or unknown: 5, Google: 4, Bing: 1, Hacker News: 1, LinkedIn: 1, X: 1}, direct_rank: 1, campaigns: [{campaign: forms-us, source: google, medium: cpc, visitors: 1}], top_pages: {/pricing: 9, /article: 8, /: 5, /app/answers: 4, /checkout: 3, /product: 3, /app: 2, /app/forms: 2, /app/settings: 2, /order-complete: 2, /contact: 1, /search: 1, …}, entry_pages_visits: {/: 5, /article: 4, /app: 2, /pricing: 2}, …}
W5	2026-11-20 00:00 UTC to read time (~11:35 UTC), day still in progress	{visitors: 10, visits_flow: 10, pageviews: 28, pageviews_people: 23, pageviews_automated: 5, events_total: 50, events_by_type: {pageview: 28, click: 18, form_submit: 4, custom: 0, dead_click: 0, rage_click: 0, error_click: 0}, sources: {Google: 2, Hacker News: 2, Direct or unknown: 1, LinkedIn: 1, Perplexity: 1, Product Hunt: 1, Reddit: 1, X: 1}, direct_rank: 3, campaigns: [{campaign: forms-us, source: google, medium: cpc, visitors: 1}, {campaign: , source: producthunt, medium: , visitors: 1}], top_pages: {/product: 9, /: 7, /pricing: 5, /contact: 2, /search: 2, /thanks: 2, /article: 1}, entry_pages_visits: {/: 7, /product: 2, /article: 1}, …}
W6	2026-11-17 00:00 UTC to 2026-11-20 ~11:35 UTC (last day partial)	{visitors: 95, visitors_per_day: {2026-11-17: 47, 2026-11-18: 25, 2026-11-19: 13, 2026-11-20: 10}, visits_flow: 95, pageviews: 271, pageviews_per_day: {2026-11-17: 140, 2026-11-18: 60, 2026-11-19: 43, 2026-11-20: 28}, pageviews_people: 232, pageviews_automated: 39, events_total: 535, events_per_day: {2026-11-17: 296, 2026-11-18: 107, 2026-11-19: 82, 2026-11-20: 50}, events_by_type: {pageview: 271, click: 193, form_submit: 25, custom: 19, dead_click: 15, rage_click: 9, error_click: 3}, sources: {Google: 14, LinkedIn: 13, Direct or unknown: 12, Hacker News: 9, Product Hunt: 8, DuckDuckGo: 7, Reddit: 7, Bing: 6, Perplexity: 6, ChatGPT: 5, newsletter: 4, X: 4}, direct_rank: 3, …}

Hourly: {H1: {window_used: 2026-11-17 23:00-24:00 UTC and 2026-11-18 00:00-01:00 UTC, visitors_per_hour: not available (hourly data is events only), 2026-11-17T23: {events: 6, pageviews: 4, pageviews_automated: 1, pageviews_with_referrer: 3}, 2026-11-18T00: {events: 17, pageviews: 10, pageviews_automated: 3, pageviews_with_referrer: 9}, counted_again_in_second_hour: yes per docs: visitors are counted once per UTC day with a daily-rotating hash, so a visitor active in both hours counts on 17 Nov and again on 18 Nov}, H2: {window_used: 2026-11-19 07:00-08:00 UTC, visitors_per_hour: not available, events: 25, pageviews: 12, pageviews_automated: 0, pages: {/article: 7, /pricing: 3, /checkout: 1, /search: 1}, referrers: {https://clicklab.privatrak.com/article: 3, https://clicklab.privatrak.com/pricing: 2, https://clicklab.privatrak.com/search?q=Test: 1}, countries: not available, browsers: not available, devices: not available}}

Notes: Privatrak project 'Click lab' ([id]), origin https://clicklab.privatrak.com, timezone UTC, complete data from 2026-11-15. Visitors = unique per UTC day; multi-day totals are sums. Visits = flow visits (30-min gap). Automated visits are counted and marked; crawlers are excluded with no count. Click-problem counts are page views with the signal. Purchase revenue is the sum of the 'total' detail (project EUR); every purchase is 8. W5 and W6 include 20 Nov, which was still in progress (~11:35 UTC). One hourly referrer breakdown for 17-18 Nov returned too much data and was not read. Read only: nothing was created or changed.

PostHog

Window	Window used	Metrics
W1	2026-11-15T00:00:00Z to 2026-11-15T23:59:59Z (UTC)	{visitors: 41, sessions: 42, pageviews: 84, bounce_rate_pct: 7.14, avg_session_duration_s: 338.5, avg_time_on_page_article_s: 71.96, seen_before_window: 1, new_in_window: 40, countries: {Singapore: 10, United States: 9, United Kingdom: 9, Germany: 8, France: 5, Thailand: 0, Brazil: 0}, sources_sessions: {direct: 12, duckduckgo.com: 7, www.google.com: 6, www.perplexity.ai: 4, www.linkedin.com: 3, www.reddit.com: 3, news.ycombinator.com: 3, chatgpt.com: 3, www.bing.com: 1}, utm_sessions: {Newsletter/email/November-Launch: 4, google/cpc/forms-us: 3, chatgpt.com/-/-: 3}, devices: {Desktop: 34, Mobile: 7}, …}
W2	2026-11-16T00:00:00Z to 2026-11-16T23:59:59Z (UTC)	{visitors: 45, sessions: 47, pageviews: 116, bounce_rate_pct: 2.13, avg_session_duration_s: 336.0, avg_time_on_page_article_s: 69.8, seen_before_window: 0, new_in_window: 45, countries: {United Kingdom: 13, Singapore: 10, United States: 10, Germany: 7, France: 5, Thailand: 0, Brazil: 0}, sources_sessions: {direct: 19, www.google.com: 7, duckduckgo.com: 6, www.perplexity.ai: 4, news.ycombinator.com: 3, chatgpt.com: 3, www.linkedin.com: 2, www.reddit.com: 2, www.bing.com: 1}, utm_sessions: {Newsletter/email/November-Launch: 10, google/cpc/forms-us: 3, chatgpt.com/-/-: 3}, devices: {Desktop: 38, Mobile: 7}, …}
W3	2026-11-17T00:00:00Z to 2026-11-18T23:59:59Z (UTC)	{visitors: 41, sessions: 53, pageviews: 106, bounce_rate_pct: 3.77, avg_session_duration_s: 288.9, avg_time_on_page_article_s: 82.99, per_day: {2026-11-17: {visitors: 39, sessions: 40, pageviews: 76}, 2026-11-18: {visitors: 14, sessions: 14, pageviews: 30}}, visitors_on_both_days: 12, seen_before_window: 0, new_in_window: 41, countries: {Singapore: 10, United States: 9, United Kingdom: 8, Germany: 7, France: 6, Thailand: 1, Brazil: 0}, sources_sessions: {direct: 14, www.linkedin.com: 7, duckduckgo.com: 6, www.google.com: 5, www.reddit.com: 5, www.perplexity.ai: 4, news.ycombinator.com: 4, chatgpt.com: 3, t.co: 2, www.bing.com: 2, app.privatrak.com: 1}, …}
W4	2026-11-19T00:00:00Z to 2026-11-19T23:59:59Z (UTC)	{visitors: 9, sessions: 9, pageviews: 20, bounce_rate_pct: 0, avg_session_duration_s: 56, avg_time_on_page_article_s: 81.66, seen_before_window: 5, new_in_window: 4, countries: {Thailand: 5, Germany: 1, United Kingdom: 1, United States: 1, France: 1, Singapore: 0, Brazil: 0}, sources_sessions: {direct: 5, www.google.com: 3, t.co: 1}, utm_sessions: {}, devices: {Desktop: 5, Mobile: 4}, …}
W5	2026-11-20T00:00:00Z to 2026-11-20T23:59:59Z (UTC), partial day (today, data to ~11:30 UTC)	{visitors: 5, sessions: 5, pageviews: 12, bounce_rate_pct: 0, avg_session_duration_s: 59, avg_time_on_page_article_s: 74.78, seen_before_window: 5, new_in_window: 0, countries: {France: 2, United Kingdom: 1, Thailand: 1, Germany: 1, Brazil: 0}, sources_sessions: {news.ycombinator.com: 2, www.perplexity.ai: 1, direct: 1, www.google.com: 1}, utm_sessions: {}, devices: {Desktop: 5}, …}
W6	2026-11-17T00:00:00Z to 2026-11-20T23:59:59Z (UTC), last day partial	{visitors: 45, sessions: 67, pageviews: 138, bounce_rate_pct: 2.99, avg_session_duration_s: 240.4, avg_time_on_page_article_s: 83.6, per_day: {2026-11-17: {visitors: 39, sessions: 40, pageviews: 76}, 2026-11-18: {visitors: 14, sessions: 14, pageviews: 30}, 2026-11-19: {visitors: 9, sessions: 9, pageviews: 20}, 2026-11-20: {visitors: 5, sessions: 5, pageviews: 12}}, seen_before_window: 0, new_in_window: 45, countries: {Singapore: 10, United States: 9, United Kingdom: 8, Germany: 7, France: 6, Thailand: 5, Brazil: 0}, sources_sessions: {direct: 20, www.google.com: 9, www.linkedin.com: 7, news.ycombinator.com: 6, duckduckgo.com: 6, www.perplexity.ai: 5, www.reddit.com: 5, t.co: 3, chatgpt.com: 3, www.bing.com: 2, app.privatrak.com: 1}, channels_visitors: {Organic Social: 17, Direct: 15, Organic Search: 13, AI: 8, Email: 4, Paid Search: 2, Referral: 1}, …}

Hourly: {H1: {2026-11-17T23:00Z: {visitors: 1, sessions: 1, pageviews: 1, country: France, browser: Chrome, device: Desktop}, 2026-11-18T00:00Z: {visitors: 1, sessions: 1, pageviews: 1, country: France, browser: Chrome, device: Desktop}, same_visitor_and_session_in_both_hours: True, counted_once_in_W3_total: True}, H2: {window: 2026-11-19T07:00Z-08:00Z, visitors: 5, sessions: 5, pageviews: 10, countries: {Thailand: 5}, browsers: {Mobile Safari: 3, Chrome: 1, Safari: 1}, devices: {Mobile: 3, Desktop: 2}, os: {iOS: 3, Mac OS X: 2}, sources: {direct: 5}, seen_on_earlier_day: 1}}

Notes: Project UTC; exact UTC days used. KPIs from query-web-overview, page tables/time-on-page from query-web-stats, other breakdowns from read-only HogQL (visitor = distinct person_id with $pageview; session-level dims from first/last pageview, dated by session start). filterTestAccounts=false. 20 Nov is partial. PostHog lifecycle returns 0 (anonymous users). ?ref=producthunt not parsed as a source (counted as direct). Revenue is the summed 'revenue' property in EUR, not converted to the project's USD base. No $exception capture so no error clicks; PostHog has no slow-click metric. Brazil absent.

Mixpanel

Window	Window used	Metrics
W1	2026-11-15 00:00-24:00 UTC (project UTC)	{visitors: 43, sessions: 43, pageviews: 104, all_events: 275, new_visitors: 43, returning_visitors: 0, countries: {United Kingdom: {visitors: 11, pageviews: 35}, Singapore: {visitors: 10, pageviews: 21}, United States: {visitors: 9, pageviews: 18}, Germany: {visitors: 8, pageviews: 19}, France: {visitors: 5, pageviews: 11}, Thailand: {visitors: 0, pageviews: 0}, Brazil: {visitors: 0, pageviews: 0}}, referrers_visitors_pageviews: {direct(undefined): [21, 25], clicklab.privatrak.com(internal): [17, 34], www.google.com: [9, 15], duckduckgo.com: [7, 7], www.reddit.com: [5, 5], news.ycombinator.com: [4, 4], www.linkedin.com: [3, 7], www.perplexity.ai: [3, 3], chatgpt.com: [3, 3], www.bing.com: [1, 1]}, utm: {forms-us|google|cpc: {visitors: 3, pageviews: 7}, November-Launch|Newsletter|email: {visitors: 3, pageviews: 11}, (no campaign)|chatgpt.com|(none): {visitors: 3, pageviews: 3}}, browsers_visitors_pageviews: {Chrome: [25, 70], Safari: [10, 22], Firefox: [6, 10], Microsoft Edge: [2, 2]}, os_visitors_pageviews: {Mac OS X: [24, 58], Android: [8, 23], Windows: [7, 12], Linux: [4, 11]}, device_visitors_pageviews: {Android: [8, 23], undefined(desktop): [35, 81]}, …}

Window	Window used	Metrics
W2	2026-11-16 00:00-24:00 UTC	{visitors: 46, sessions: 48, pageviews: 134, all_events: 377, new_visitors: 46, returning_visitors: 0, countries: {United Kingdom: {visitors: 14, pageviews: 63}, United States: {visitors: 11, pageviews: 20}, Singapore: {visitors: 9, pageviews: 20}, Germany: {visitors: 7, pageviews: 20}, France: {visitors: 5, pageviews: 11}, Thailand: {visitors: 0, pageviews: 0}, Brazil: {visitors: 0, pageviews: 0}}, referrers_visitors_pageviews: {direct(undefined): [24, 30], clicklab.privatrak.com(internal): [22, 54], www.google.com: [13, 23], duckduckgo.com: [5, 5], www.reddit.com: [4, 4], news.ycombinator.com: [4, 4], www.linkedin.com: [3, 7], www.perplexity.ai: [3, 3], chatgpt.com: [3, 3], www.bing.com: [1, 1]}, utm: {forms-us|google|cpc: {visitors: 3, pageviews: 7}, November-Launch|Newsletter|email: {visitors: 7, pageviews: 41}, (no campaign)|chatgpt.com|(none): {visitors: 3, pageviews: 3}}, browsers_visitors_pageviews: {Chrome: [23, 72], Safari: [13, 37], Firefox: [8, 23], Microsoft Edge: [2, 2]}, os_visitors_pageviews: {Mac OS X: [29, 88], Android: [7, 24], Windows: [7, 12], Linux: [3, 10]}, device_visitors_pageviews: {Android: [7, 24], undefined(desktop): [39, 110]}, …}
W3	2026-11-17 00:00 to 2026-11-18 24:00 UTC	{visitors: 40, visitors_per_day: {2026-11-17: 40, 2026-11-18: 13}, sessions: 54, sessions_per_day: {2026-11-17: 41, 2026-11-18: 13}, pageviews: 124, pageviews_per_day: {2026-11-17: 95, 2026-11-18: 29}, all_events: 331, new_visitors: 40, returning_visitors: 0, day18_visitors_seen_on_17: 13, countries: {United States: {visitors: 10, pageviews: 26}, Singapore: {visitors: 9, pageviews: 20}, United Kingdom: {visitors: 9, pageviews: 36}, Germany: {visitors: 7, pageviews: 25}, France: {visitors: 5, pageviews: 17}, Thailand: {visitors: 0, pageviews: 0}, Brazil: {visitors: 0, pageviews: 0}}, countries_per_day_visitors_pageviews: {2026-11-17: {United States: [10, 20], Singapore: [9, 20], United Kingdom: [9, 24], Germany: [7, 20], France: [5, 11]}, 2026-11-18: {United States: [4, 6], United Kingdom: [4, 12], Germany: [3, 5], France: [2, 6], Singapore: [0, 0]}}, …}
W4	2026-11-19 00:00-24:00 UTC	{visitors: 6, sessions: 6, pageviews: 23, all_events: 59, new_visitors: 1, returning_visitors: 5, countries: {United States: {visitors: 2, pageviews: 7}, France: {visitors: 2, pageviews: 8}, United Kingdom: {visitors: 1, pageviews: 5}, Thailand: {visitors: 1, pageviews: 3}, Singapore: {visitors: 0, pageviews: 0}, Germany: {visitors: 0, pageviews: 0}, Brazil: {visitors: 0, pageviews: 0}}, referrers_visitors_pageviews: {clicklab.privatrak.com(internal): [4, 9], www.google.com: [3, 7], direct(undefined): [2, 2], www.linkedin.com: [1, 5]}, utm: {(no campaign)|chatgpt.com|(none): {visitors: 1, pageviews: 4}}, browsers_visitors_pageviews: {Chrome: [3, 11], Safari: [2, 7], Firefox: [1, 5]}, os_visitors_pageviews: {Mac OS X: [3, 12], Android: [1, 3], Windows: [1, 3], Linux: [1, 5]}, device_visitors_pageviews: {Android: [1, 3], undefined(desktop): [5, 20]}, …}
W5	2026-11-20 00:00 UTC to query time (day still in progress)	{visitors: 4, sessions: 4, pageviews: 12, all_events: 31, new_visitors: 0, returning_visitors: 4, countries: {France: {visitors: 2, pageviews: 7}, United Kingdom: {visitors: 1, pageviews: 3}, United States: {visitors: 1, pageviews: 2}, Singapore: {visitors: 0, pageviews: 0}, Germany: {visitors: 0, pageviews: 0}, Thailand: {visitors: 0, pageviews: 0}, Brazil: {visitors: 0, pageviews: 0}}, referrers_visitors_pageviews: {clicklab.privatrak.com(internal): [4, 8], news.ycombinator.com: [1, 1], www.reddit.com: [1, 1], www.perplexity.ai: [1, 1], direct(undefined): [1, 1]}, utm: {}, browsers_visitors_pageviews: {Chrome: [3, 9], Safari: [1, 3]}, os_visitors_pageviews: {Windows: [1, 4], Linux: [1, 3], Mac OS X: [1, 3], Android: [1, 2]}, device_visitors_pageviews: {Android: [1, 2], undefined(desktop): [3, 10]}, …}
W6	2026-11-17 00:00 UTC to 2026-11-20 query time (UTC; last day partial)	{visitors: 41, visitors_per_day: {2026-11-17: 40, 2026-11-18: 13, 2026-11-19: 6, 2026-11-20: 4}, sessions: 64, sessions_per_day: {2026-11-17: 41, 2026-11-18: 13, 2026-11-19: 6, 2026-11-20: 4}, pageviews: 159, pageviews_per_day: {2026-11-17: 95, 2026-11-18: 29, 2026-11-19: 23, 2026-11-20: 12}, all_events: 421, new_visitors: 41, returning_visitors: 0, countries: {United Kingdom: {visitors: 9, pageviews: 44}, United States: {visitors: 10, pageviews: 35}, France: {visitors: 5, pageviews: 32}, Germany: {visitors: 7, pageviews: 25}, Singapore: {visitors: 9, pageviews: 20}, Thailand: {visitors: 1, pageviews: 3}, Brazil: {visitors: 0, pageviews: 0}}, referrers_visitors_pageviews: {clicklab.privatrak.com(internal): [22, 64], direct(undefined): [20, 27], www.google.com: [10, 19], www.linkedin.com: [7, 15], news.ycombinator.com: [7, 7], www.reddit.com: [7, 9], duckduckgo.com: [5, 5], www.perplexity.ai: [4, 4], chatgpt.com: [4, 4], www.bing.com: [3, 3], t.co: [2, 2]}, utm: {forms-us|google|cpc: {visitors: 3, pageviews: 9}, November-Launch|Newsletter|email: {visitors: 2, pageviews: 2}, (no campaign)|chatgpt.com|(none): {visitors: 4, pageviews: 11}}, …}

Hourly: {H1: {2026-11-17T23:00Z: {visitors: 1, pageviews: 1}, 2026-11-18T00:00Z: {visitors: 1, pageviews: 3}, both_hours_unique_visitors: 1, country: United States, same_visitor_counted_in_both_hours: True}, H2: {2026-11-19T07:00Z: {visitors: 1, pageviews: 3, country: Thailand, browser: Safari, os: Mac OS X, device: undefined (desktop)}}}

Notes: Mixpanel project 'Privatrak' ; timezone UTC (event time 06:05:22 vs ingestion timestamp 06:05:29 UTC). Data starts 2026-11-14; 20 Nov is today and partial. Visitors = Mixpanel unique users (distinct_id); sessions = Session Start count (the built-in 'session' count returned total events). New/returning worked out from unique-user counts over overlapping date ranges since 14 Nov. Only page views carry current_domain; 4 page views from localhost exist; all other events have no domain and are included. Referrer 'undefined' = direct. UTM values stay attached to later page views. Exit pages unusable (Session End repeats the first URL). No bounce rate, time on page, error/slow clicks or bot reporting; Get-Issues empty. Brazil absent everywhere; /article?ref=producthunt never appears. One page view dated 19 Nov 06:09 was received 20 Nov 04:02 UTC. Many ordinary link clicks were also recorded as dead clicks.

Google Analytics 4

Window	Window used	Metrics
W1	2026-11-15 00:00-24:00 UTC exact (property tz America/Los_Angeles; local hours 14 Nov 16:00 - 15 Nov 15:59)	{users: 47, active_users: 47, new_users: 46, sessions: 48, pageviews: 127, events: 391, engaged_sessions: 42, bounce_rate: 0.125, avg_session_duration_s: 503.5, article_avg_time_on_page_s: 36.4, new_vs_returning_users: {new: 46, returning: 1}, countries_users: {United States: 12, Singapore: 10, United Kingdom: 10, Germany: 9, France: 6, Indonesia: 1, Thailand: 0, Brazil: 0}, …}
W2	2026-11-16 00:00-24:00 UTC exact	{users: 51, new_users: 51, sessions: 53, pageviews: 183, events: 555, bounce_rate: 0.0755, avg_session_duration_s: 563.0, article_avg_time_on_page_s: 37.1, new_vs_returning_users: {new: 51, returning: 2}, countries_users: {United Kingdom: 14, United States: 13, Singapore: 10, Germany: 8, France: 6, Thailand: 0, Brazil: 0}, sources_sessions: {(direct): 10, Newsletter/email (November-Launch): 10, google/organic: 7, duckduckgo/organic: 6, linkedin.com: 4, news.ycombinator.com: 4, perplexity.ai: 4, chatgpt.com: 3, google/cpc (forms-us): 2, reddit.com: 2, bing/organic: 1}, devices_users: {desktop: 43, mobile: 8}, …}

Window	Window used	Metrics
W3	2026-11-17 00:00 - 2026-11-19 00:00 UTC exact	{users: 49, new_users: 49, sessions: 70, pageviews: 179, events: 524, bounce_rate: 0.157, avg_session_duration_s: 420.7, article_avg_time_on_page_s: 44.9, per_day: {2026-11-17: {users: 45, new_users: 45, sessions: 47, pageviews: 123, bounce_rate: 0.106, avg_session_duration_s: 500.1, plan_selected: 3, purchase: 3, revenue_usd: 26.46, contact_sent: 3, pdf_download: 2, outbound_w3org: 1}, 2026-11-18: {users: 27, new_users: 4, sessions: 27, pageviews: 56, bounce_rate: 0.222, avg_session_duration_s: 220.1, plan_selected: 2, purchase: 2, revenue_usd: 17.64, contact_sent: 1, pdf_download: 0, outbound_w3org: 2}}, new_vs_returning_users: {new: 49, returning: 19, not_set: 2}, countries_users: {United States: 12, Singapore: 10, United Kingdom: 10, Germany: 9, France: 6, New Zealand: 1, Spain: 1, Thailand: 1, Brazil: 0}, sources_sessions: {(direct): 12, linkedin.com: 10, duckduckgo/organic: 7, google/organic: 6, news.ycombinator.com: 6, reddit.com: 6, Newsletter/email (November-Launch): 5, chatgpt.com: 5, perplexity.ai: 5, bing/organic: 3, google/cpc (forms-us): 2, t.co: 2, …}, …}
W4	2026-11-19 00:00-24:00 UTC exact	{users: 11, new_users: 2, sessions: 11, pageviews: 35, events: 85, bounce_rate: 0.182, avg_session_duration_s: 51.8, article_avg_time_on_page_s: 20.5, new_vs_returning_users: {new: 2, returning: 8, not_set: 1}, countries_users: {France: 3, Thailand: 3, United States: 3, Germany: 1, United Kingdom: 1, Singapore: 0, Brazil: 0}, sources_sessions: {(direct): 3, google/organic: 3, bing/organic: 1, google/cpc (forms-us): 1, linkedin.com: 1, news.ycombinator.com: 1, t.co: 1}, devices_users: {desktop: 9, mobile: 2}, …}
W5	2026-11-20 00:00-24:00 UTC requested; no data after 05:00 UTC returned (day not over or GA still processing)	{users: 11, new_users: 1, sessions: 11, pageviews: 29, events: 76, bounce_rate: 0.0909, avg_session_duration_s: 51.4, article_avg_time_on_page_s: 76, new_vs_returning_users: {new: 1, returning: 10}, countries_users: {France: 4, United States: 3, United Kingdom: 2, Germany: 1, Thailand: 1, Singapore: 0, Brazil: 0}, sources_sessions: {linkedin.com: 2, news.ycombinator.com: 2, (direct): 1, (not set): 1, chatgpt.com: 1, google/cpc (forms-us): 1, google/organic: 1, perplexity.ai: 1, reddit.com: 1, t.co: 1}, devices_users: {desktop: 10, mobile: 1}, …}
W6	2026-11-17 00:00 - 2026-11-21 00:00 UTC exact (20 Nov possibly incomplete)	{users: 51, new_users: 52, sessions: 92, pageviews: 243, events: 685, bounce_rate: 0.152, avg_session_duration_s: 332.4, article_avg_time_on_page_s: 40.6, per_day: {2026-11-17: {users: 45, sessions: 47, pageviews: 123}, 2026-11-18: {users: 27, sessions: 27, pageviews: 56}, 2026-11-19: {users: 11, sessions: 11, pageviews: 35}, 2026-11-20: {users: 11, sessions: 11, pageviews: 29}}, new_vs_returning_users: {new: 51, returning: 24, not_set: 2}, countries_users: {United States: 12, Singapore: 10, United Kingdom: 10, Germany: 9, France: 6, Thailand: 3, New Zealand: 1, Spain: 1, Brazil: 0}, sources_sessions: {(direct): 16, linkedin.com: 13, google/organic: 10, news.ycombinator.com: 9, duckduckgo/organic: 7, reddit.com: 7, chatgpt.com: 6, perplexity.ai: 6, Newsletter/email (November-Launch): 5, bing/organic: 4, google/cpc (forms-us): 4, t.co: 4, …}, …}

Hourly: {H1: {2026-11-17T23:00Z: {users: 4, new_users: 2, sessions: 4}, 2026-11-18T00:00Z: {users: 4, new_users: 0, sessions: 4}, both_hours_users: 4, both_hours_sessions: 4, both_hours_pageviews: 15, same_visitors_counted_again: True, visitors: [France desktop Chrome Mac (Newsletter), France desktop Chrome Mac (linkedin.com), UK desktop Safari Mac (google), US mobile Chrome Android (bing)]}, H2: {2026-11-19T07:00Z: {users: 3, sessions: 3, pageviews: 11, countries: {Thailand: 3}, source: (direct), combos: [desktop Chrome Macintosh (returning), desktop Safari Macintosh (new), mobile Safari iOS (new)]}}}

Notes: GA4 property 'Click lab' , tz America/Los_Angeles (UTC-8 in Nov). Exact UTC windows built by filtering dateHour on local hours D-1 16:00 to D 15:59. Users = GA client IDs. Revenue in USD (~$8.80 per purchase). Brazil absent everywhere. The 404 is identified by the page title 'Page not found' on /templates. GA4 has no exit-page field, click-problem data or bot-filter counts. Each day brings ~45-50 new users and W4/W5 are mostly returning users, so W6 has only 51 users. No data after 20 Nov 05:00 UTC.

Cloudflare

Window	Window used	Metrics
W1	2026-11-15T00:00Z to 2026-11-16T00:00Z (UTC), Cloudflare Web Analytics site clicklab.privatrak.com	{visits: 56, pageviews: 103, countries_pv_visits: {United Kingdom: [27, 14], Singapore: [24, 10], United States: [22, 11], Germany: [18, 13], France: [12, 8], Thailand: [0, 0], Brazil: [0, 0]}, sources_visits: {direct: 21, www.google.com: 11, duckduckgo.com: 6, www.reddit.com: 4, www.perplexity.ai: 4, www.linkedin.com: 4, news.ycombinator.com: 3, chatgpt.com: 2, www.bing.com: 1}, internal_referral_pageviews: 47, devices_visits: {desktop: 45, mobile: 11}, browsers_visits: {Chrome: 30, ChromeMobile: 11, Firefox: 11, Safari: 2, Edge: 2}, os_visits: {MacOSX: 32, Android: 11, Windows: 8, Linux: 5}, pages_pv: {/: 18, /lab: 14, /product: 14, /article: 13, /pricing: 11, /app/answers: 8, /app/forms: 4, /app/settings: 4, /app: 4, /checkout: 3, /templates: 3, /search: 3, …}, entry_pages_visits: {/: 17, /lab: 14, /article: 13, /product: 5, /app: 4, /pricing: 3}, spa_routes_present: True, query_string_pages_separate: False, …}
W2	2026-11-16T00:00Z to 2026-11-17T00:00Z (UTC)	{visits: 78, pageviews: 161, countries_pv_visits: {United Kingdom: [58, 26], United States: [48, 20], Singapore: [24, 10], Germany: [19, 14], France: [12, 8], Thailand: [0, 0], Brazil: [0, 0]}, sources_visits: {direct: 30, www.google.com: 25, duckduckgo.com: 5, www.reddit.com: 4, www.perplexity.ai: 4, www.linkedin.com: 4, news.ycombinator.com: 3, chatgpt.com: 2, www.bing.com: 1}, internal_referral_pageviews: 83, devices_visits: {desktop: 66, mobile: 12}, browsers_visits: {Chrome: 31, Firefox: 21, Safari: 12, ChromeMobile: 12, Edge: 2}, os_visits: {MacOSX: 54, Android: 12, Windows: 8, Linux: 4}, pages_pv: {/: 23, /pricing: 21, /product: 20, /lab: 17, /article: 17, /app/answers: 11, /checkout: 9, /order-complete: 9, /app: 6, /templates: 5, /app/forms: 5, /search: 5, …}, entry_pages_visits: {/: 20, /lab: 17, /article: 17, /pricing: 10, /product: 8, /app: 6}, bot_flagged_pageviews: 0}
W3	2026-11-17T00:00Z to 2026-11-19T00:00Z (UTC)	{visits: 95, pageviews: 196, per_day: {2026-11-17: {visits: 72, pageviews: 134}, 2026-11-18: {visits: 23, pageviews: 62}}, countries_pv_visits: {United States: [52, 28], United Kingdom: [43, 19], France: [36, 19], Germany: [36, 19], Singapore: [29, 10], Thailand: [0, 0], Brazil: [0, 0]}, sources_visits: {direct: 36, www.google.com: 9, www.linkedin.com: 9, www.reddit.com: 8, duckduckgo.com: 8, news.ycombinator.com: 7, chatgpt.com: 7, www.perplexity.ai: 5, www.bing.com: 4, t.co: 2}, internal_referral_pageviews: 101, devices_visits: {desktop: 76, mobile: 19}, browsers_visits: {Chrome: 31, Safari: 29, ChromeMobile: 19, Firefox: 14, Edge: 2}, os_visits: {MacOSX: 61, Android: 19, Windows: 9, Linux: 6}, pages_pv: {/product: 36, /: 33, /pricing: 24, /article: 21, /lab: 19, /app/answers: 12, /checkout: 7, /order-complete: 7, /app/forms: 6, /search: 6, /app/settings: 6, /app: 6, …}, entry_pages_visits: {/: 29, /article: 21, /lab: 19, /product: 12, /pricing: 8, /app: 6}, bot_flagged_pageviews: 0}

Window	Window used	Metrics
W4	2026-11-19T00:00Z to 2026-11-20T00:00Z (UTC)	{visits: 15, pageviews: 42, countries_pv_visits: {United States: [10, 3], France: [9, 3], Thailand: [9, 5], Singapore: [6, 2], United Kingdom: [5, 1], Germany: [3, 1], Brazil: [0, 0]}, sources_visits: {direct: 8, www.google.com: 4, t.co: 1, news.ycombinator.com: 1, www.linkedin.com: 1}, internal_referral_pageviews: 27, devices_visits: {desktop: 9, mobile: 6}, browsers_visits: {MobileSafari: 5, Firefox: 3, Chrome: 3, Safari: 3, ChromeMobile: 1}, os_visits: {MacOSX: 7, iOS: 5, Linux: 1, Windows: 1, Android: 1}, pages_pv: {/article: 9, /pricing: 9, /checkout: 4, /app/answers: 4, /: 3, /app/forms: 2, /product: 2, /app/settings: 2, /order-complete: 2, /app: 2, /search: 1, /thanks: 1, …}, entry_pages_visits: {/article: 8, /: 3, /pricing: 2, /app: 2}, bot_flagged_pageviews: 0}
W5	2026-11-20T00:00Z to 2026-11-21T00:00Z (UTC); day in progress, beacon data only up to the 05:00 UTC hour	{visits: 10, pageviews: 26, countries_pv_visits: {France: [12, 4], United Kingdom: [6, 2], United States: [4, 2], Germany: [3, 1], Thailand: [1, 1], Singapore: [0, 0], Brazil: [0, 0]}, sources_visits: {direct: 3, news.ycombinator.com: 2, t.co: 1, www.reddit.com: 1, www.google.com: 1, www.perplexity.ai: 1, www.linkedin.com: 1}, internal_referral_pageviews: 16, devices_visits: {desktop: 9, mobile: 1}, browsers_visits: {Chrome: 5, Safari: 2, Firefox: 2, ChromeMobile: 1}, os_visits: {MacOSX: 7, Windows: 1, Linux: 1, Android: 1}, pages_pv: {/: 8, /product: 6, /pricing: 5, /search: 2, /thanks: 2, /contact: 2, /article: 1}, entry_pages_visits: {/: 8, /product: 1, /article: 1}, bot_flagged_pageviews: 0, zone_proxy_requests_11h: 9}
W6	2026-11-17T00:00Z to 2026-11-21T00:00Z (UTC); 20 Nov partial	{visits: 120, pageviews: 264, per_day: {2026-11-17: {visits: 72, pageviews: 134}, 2026-11-18: {visits: 23, pageviews: 62}, 2026-11-19: {visits: 15, pageviews: 42}, 2026-11-20: {visits: 10, pageviews: 26}}, countries_pv_visits: {United States: [66, 33], France: [57, 26], United Kingdom: [54, 22], Germany: [42, 21], Singapore: [35, 12], Thailand: [10, 6], Brazil: [0, 0]}, sources_visits: {direct: 47, www.google.com: 14, www.linkedin.com: 11, news.ycombinator.com: 10, www.reddit.com: 9, duckduckgo.com: 8, chatgpt.com: 7, www.perplexity.ai: 6, t.co: 4, www.bing.com: 4}, internal_referral_pageviews: 144, devices_visits: {desktop: 94, mobile: 26}, browsers_visits: {Chrome: 39, Safari: 34, ChromeMobile: 21, Firefox: 19, MobileSafari: 5, Edge: 2}, os_visits: {MacOSX: 75, Android: 21, Windows: 11, Linux: 8, iOS: 5}, pages_pv: {/product: 44, /: 44, /pricing: 38, /article: 31, /lab: 19, /app/answers: 16, /checkout: 11, /search: 9, /order-complete: 9, /app/forms: 8, /app/settings: 8, /app: 8, …}, entry_pages_visits: {/: 40, /article: 30, /lab: 19, /product: 13, /pricing: 10, /app: 8}, active_hours_utc_pv_visits: {11-17T05: [111, 58], 11-17T06: [10, 5], 11-17T10: [7, 4], 11-17T14: [2, 2], 11-17T23: [4, 3], 11-18T00: [10, 4], 11-18T05: [22, 9], 11-18T06: [24, 9], 11-18T11: [5, 0], 11-18T17: [1, 1], 11-19T06: [27, 8], 11-19T07: [15, 7], …}, …}

Hourly: {H1: {2026-11-17T23:00Z: {pageviews: 4, visits: 3, visit_sources: [France direct, US bing, France linkedin]}, 2026-11-18T00:00Z: {pageviews: 10, visits: 4, visit_sources: [UK bing, France chatgpt, France direct, US reddit]}, combined: {pageviews: 14, visits: 7}, double_counting: unknown: no visitor identity; a visit is counted once, in the hour of its first page view}, H2: {2026-11-19T07:00Z: {pageviews: 15, visits: 7, countries_pv_visits: {Thailand: [9, 5], Singapore: [6, 2]}, devices_visits: {mobile: 5, desktop: 2}, browsers_pv_visits: {MobileSafari: [9, 5], Safari: [3, 1], Chrome: [3, 1]}, os_visits: {iOS: 5, MacOSX: 2}, note: all 5 Thailand visits were direct landings on /article}}}

Notes: Cloudflare Web Analytics browser beacon via GraphQL rumPageloadEventsAdaptiveGroups; exact UTC windows; sampleInterval 1. visits = page views whose referrer is not this site; no unique-visitor metric. Query strings dropped from paths. App routes recorded as client-side navigations. Zone proxy logs saw only 9 requests to this host (20 Nov 11:00 UTC), so the site is mostly not proxied. 13 calls in total: 1 failed call (field not available on the plan) and 2 docs searches.

LogRocket

Window	Window used	Metrics
W1	2026-11-15T00:00Z–2026-11-16T00:00Z UTC	{unique_users: 39, sessions: 56, pageviews: 110, countries_sessions: {Germany: 14, United States: 12, United Kingdom: 11, Singapore: 10, France: 9, Thailand: 0, Brazil: 0}, referrers_sessions: {direct: 16, google.com: 9, duckduckgo.com: 6, linkedin.com: 5, clicklab.privatrak.com(self): 5, perplexity.ai: 4, reddit.com: 4, news.ycombinator.com: 3, chatgpt.com: 2, bing.com: 1, t.co: 1}, utm: {November-Launch/Newsletter/email: 3, forms-us/google/cpc: 3, utm_source=chatgpt.com: 2}, devices: {desktop: 44, mobile: 12, tablet: 0}, browsers: {Chrome: 38, Firefox: 14, Edge: 2, Safari: 2}, os: {Mac OS: 31, Android: 12, Windows: 8, Linux: 5}, bounce_rate_pct: 58.9, avg_session_duration_s: 36.4, avg_time_on_article_s: 28.8, …}
W2	2026-11-16T00:00Z–2026-11-17T00:00Z UTC	{unique_users: 43, sessions: 63, pageviews: 166, countries_sessions: {United Kingdom: 17, Germany: 14, United States: 13, Singapore: 10, France: 9, Thailand: 0, Brazil: 0}, referrers_sessions: {direct: 16, clicklab.privatrak.com(self): 12, google.com: 10, linkedin.com: 5, duckduckgo.com: 5, reddit.com: 4, perplexity.ai: 4, news.ycombinator.com: 3, chatgpt.com: 2, bing.com: 1, t.co: 1}, utm: {November-Launch/Newsletter/email: 9, forms-us/google/cpc: 3, utm_source=chatgpt.com: 2}, devices: {desktop: 51, mobile: 12, tablet: 0}, browsers: {Chrome: 37, Firefox: 18, Safari: 6, Edge: 2}, os: {Mac OS: 39, Android: 12, Windows: 8, Linux: 4}, bounce_rate_pct: 52.4, avg_session_duration_s: 59.2, avg_time_on_article_s: 32.3, …}
W3	2026-11-17T00:00Z–2026-11-19T00:00Z UTC	{unique_users: 47, unique_users_per_day: {2026-11-17: 45, 2026-11-18: 25}, sessions: 98, sessions_per_day: {2026-11-17: 73, 2026-11-18: 25}, pageviews: 199, pageviews_per_day: {2026-11-17: 136, 2026-11-18: 63}, countries_sessions: {United States: 29, Germany: 20, United Kingdom: 19, France: 19, Singapore: 10, Thailand: 1, Brazil: 0}, referrers_sessions: {direct: 27, linkedin.com: 11, clicklab.privatrak.com(self): 10, google.com: 9, reddit.com: 8, duckduckgo.com: 8, news.ycombinator.com: 7, chatgpt.com: 6, perplexity.ai: 5, bing.com: 4, t.co: 2, app.privatrak.com: 1}, utm: {November-Launch/Newsletter/email: 5, forms-us/google/cpc: 3, utm_source=chatgpt.com: 7}, devices: {desktop: 79, mobile: 19, tablet: 0}, browsers: {Chrome: 51, Safari: 28, Firefox: 17, Edge: 2}, os: {Mac OS: 64, Android: 19, Windows: 9, Linux: 6}, …}
W4	2026-11-19T00:00Z–2026-11-20T00:00Z UTC	{unique_users: 14, sessions: 14, pageviews: 42, countries_sessions: {Thailand: 5, United States: 4, France: 3, Germany: 1, United Kingdom: 1, Singapore: 0, Brazil: 0}, referrers_sessions: {clicklab.privatrak.com(self): 5, google.com: 4, direct: 1, linkedin.com: 1, news.ycombinator.com: 1, bing.com: 1, t.co: 1}, utm: {forms-us/google/cpc: 1}, devices: {desktop: 10, mobile: 4, tablet: 0}, browsers: {Chrome: 4, Firefox: 4, Mobile Safari: 3, Safari: 3}, os: {Mac OS: 8, iOS: 3, Android: 1, Linux: 1, Windows: 1}, bounce_rate_pct: 21.4, avg_session_duration_s: 49.4, avg_time_on_article_s: 31.0, …}
W5	2026-11-20T00:00Z–2026-11-21T00:00Z UTC (partial; day in progress at query time)	{unique_users: 11, sessions: 11, pageviews: 29, countries_sessions: {France: 4, United States: 3, United Kingdom: 2, Germany: 1, Thailand: 1, Singapore: 0, Brazil: 0}, referrers_sessions: {google.com: 2, clicklab.privatrak.com(self): 2, news.ycombinator.com: 2, direct: 1, linkedin.com: 1, reddit.com: 1, perplexity.ai: 1, t.co: 1}, utm: {forms-us/google/cpc: 1}, devices: {desktop: 10, mobile: 1, tablet: 0}, browsers: {Chrome: 6, Firefox: 3, Safari: 2}, os: {Mac OS: 8, Android: 1, Linux: 1, Windows: 1}, bounce_rate_pct: 18.2, avg_session_duration_s: 45.6, avg_time_on_article_s: 42.0, …}

Window	Window used	Metrics
W6	2026-11-17T00:00Z–2026-11-21T00:00Z UTC (20 Nov partial)	{unique_users: 51, unique_users_per_day: {2026-11-17: 45, 2026-11-18: 25, 2026-11-19: 14, 2026-11-20: 11}, sessions: 123, sessions_per_day: {2026-11-17: 73, 2026-11-18: 25, 2026-11-19: 14, 2026-11-20: 11}, pageviews: 270, pageviews_per_day: {2026-11-17: 136, 2026-11-18: 63, 2026-11-19: 42, 2026-11-20: 29}, countries_sessions: {United States: 36, France: 26, Germany: 22, United Kingdom: 22, Singapore: 10, Thailand: 7, Brazil: 0}, referrers_sessions: {direct: 29, clicklab.privatrak.com(self): 17, google.com: 15, linkedin.com: 13, news.ycombinator.com: 10, reddit.com: 9, duckduckgo.com: 8, chatgpt.com: 6, perplexity.ai: 6, bing.com: 5, t.co: 4, app.privatrak.com: 1}, utm: {November-Launch/Newsletter/email: 5, forms-us/google/cpc: 5, utm_source=chatgpt.com: 7}, devices: {desktop: 99, mobile: 24, tablet: 0}, browsers: {Chrome: 61, Safari: 33, Firefox: 24, Mobile Safari: 3, Edge: 2}, os: {Mac OS: 80, Android: 21, Windows: 11, Linux: 8, iOS: 3}, …}

Hourly: {H1: {2026-11-17T23:00Z: {unique_users: 3, sessions: 3}, 2026-11-18T00:00Z: {unique_users: 4, sessions: 4}, combined_2h_unique_users: 4, first_hour_users_counted_again_in_second: True, users_in_both_hours: 3}, H2: {2026-11-19T07:00Z: {unique_users: 5, sessions: 5, countries: {Thailand: 5}, browsers: {Mobile Safari: 3, Chrome: 1, Safari: 1}, os: {iOS: 3, Mac OS: 2}, devices: {mobile: 3, desktop: 2}}}}

Notes: LogRocket org, project Test. Unique users = distinct (anonymous) user IDs. Duration values treated as ms. W3 per-URL rows derived by subtraction. W1+W2+W6 users = 133 = whole-period users, so no users carry over between 15 Nov, 16 Nov and 17-20 Nov. Click-issue counts are issue-lifetime approximations, not per window. No bot flag exists. The assistant built unsaved draft metrics and says nothing was saved.

Sentry

Window	Window used	Metrics
W1	2026-11-15 00:00-24:00 UTC (exact)	{replays: 62, distinct_ips: 31, avg_replay_duration_s: 39.9, single_url_replay_pct: 66.1, countries_replays: {GB: 15, DE: 12, FR: 9, US: 11, BR: 14, TH: 0, SG: 0, other: 1}, browsers: {Chrome: 27, Safari: 13, Firefox: 10, Chrome Mobile: 10, Edge: 2}, pages_replays: {/: 20, /article: 15, /product: 12, /pricing: 10, /lab: 14, /checkout?plan=team: 4, /order-complete: 4, /search: 4, /templates: 3, /contact: 1, /app: 4, /app/answers: 2, …}, entry_pages: {/lab: 14, /: 12, /article: 11, /product: 6}, utm: {Newsletter/email/November-Launch: 4, google/cpc/forms-us: 3, chatgpt.com: 3}, ref_producthunt: 4, errors: {total: 4, lab_save_draft_failed: 3, mouseflow_load_failed: 1}, error_countries: {GB: 1, DE: 1, FR: 1, US: 1}, …}
W2	2026-11-16 00:00-24:00 UTC (exact)	{replays: 74, distinct_ips: 31, avg_replay_duration_s: 46.8, single_url_replay_pct: 56.8, countries_replays: {GB: 27, DE: 13, FR: 9, US: 13, BR: 12, TH: 0, SG: 0}, browsers: {Chrome: 26, Safari: 20, Firefox: 17, Chrome Mobile: 10, Edge: 1}, pages_replays: {/: 24, /article: 14, /product: 15, /pricing: 17, /lab: 15, /checkout?plan=team: 10, /order-complete: 10, /search: 6, /templates: 5, /contact: 1, /app: 4, /app/answers: 2, …}, utm: {Newsletter/email/November-Launch: 9, google/cpc/forms-us: 3, chatgpt.com: 2}, ref_producthunt: 5, errors: {total: 7, lab_save_draft_failed: 4, mouseflow_load_failed: 3}, error_countries: {US: 2, DE: 1, GB: 4}, lab_dead_clicks: 4, …}
W3	2026-11-17 00:00 to 2026-11-19 00:00 UTC (exact)	{replays: 78, replays_per_day: {2026-11-17: 62, 2026-11-18: 16}, distinct_ips: 43, distinct_ips_per_day: {2026-11-17: 33, 2026-11-18: 12}, ips_on_both_days: 2, avg_replay_duration_s: 40.2, single_url_replay_pct: 61.5, countries_replays: {GB: 13, DE: 10, FR: 13, US: 20, BR: 21, TH: 0, SG: 0, other: 1}, browsers: {Chrome: 28, Safari: 19, Chrome Mobile: 16, Firefox: 13, Edge: 2}, pages_replays: {/: 26, /article: 20, /product: 19, /pricing: 17, /lab: 14, /checkout?plan=team: 5, /order-complete: 4, /search: 4, /templates: 3, /contact: 1, /app: 4, /app/answers: 2, …}, utm: {Newsletter/email/November-Launch: 4, google/cpc/forms-us: 3, chatgpt.com: 4}, ref_producthunt: 6, …}
W4	2026-11-19 00:00-24:00 UTC (exact)	{replays: 10, distinct_ips: 9, avg_replay_duration_s: 62.3, single_url_replay_pct: 10, countries_replays: {GB: 1, DE: 1, FR: 2, US: 2, BR: 2, TH: 2, SG: 0}, browsers: {Chrome: 3, Safari: 2, Firefox: 2, Mobile Safari: 2, Chrome Mobile: 1}, pages_replays: {/: 3, /article: 4, /product: 2, /pricing: 7, /checkout?plan=team: 2, /order-complete: 1, /contact: 1, /app: 2, /app/answers: 2, /app/settings: 2}, errors: 0, dead_clicks: 0, rage_clicks: 0}
W5	2026-11-20 00:00 to ~11:40 UTC (partial day, read time)	{replays: 7, distinct_ips: 7, avg_replay_duration_s: 64.0, single_url_replay_pct: 28.6, countries_replays: {FR: 3, GB: 1, DE: 1, US: 1, TH: 1, BR: 0, SG: 0}, browsers: {Chrome: 4, Firefox: 1, Chrome Mobile: 1, Safari: 1}, pages_replays: {/: 5, /product: 3, /pricing: 3, /article: 1, /search: 1, /thanks: 1}, errors: 0, dead_clicks: 0, rage_clicks: 0}
W6	2026-11-17 00:00 to 2026-11-20 ~11:40 UTC (last day partial)	{replays: 95, replays_per_day: {2026-11-17: 62, 2026-11-18: 16, 2026-11-19: 10, 2026-11-20: 7}, distinct_ips: 59, distinct_ips_per_day: {2026-11-17: 33, 2026-11-18: 12, 2026-11-19: 9, 2026-11-20: 7}, avg_replay_duration_s: 44.2, single_url_replay_pct: 53.7, countries_replays: {GB: 15, DE: 12, FR: 18, US: 23, BR: 23, TH: 3, SG: 0, other: 1}, browsers: {Chrome: 35, Safari: 22, Chrome Mobile: 18, Firefox: 16, Edge: 2, Mobile Safari: 2}, pages_replays: {/: 34, /article: 25, /product: 24, /pricing: 27, /lab: 14, /checkout?plan=team: 7, /order-complete: 5, /search: 5, /templates: 3, /contact: 2, /app: 6, /app/answers: 4, …}, utm: {Newsletter/email/November-Launch: 4, google/cpc/forms-us: 3, chatgpt.com: 4}, ref_producthunt: 6, errors: 3, …}

Hourly: {H1: {2026-11-17T23: {replays: 2, distinct_ips: 2, countries: {FR: 1, US: 1}}, 2026-11-18T00: {replays: 2, distinct_ips: 2, countries: {FR: 1, US: 1}}, same_ips_in_both_hours: 2, counted_again_as_new_replays: True}, H2: {2026-11-19T07: {replays: 4, distinct_ips: 3, countries: {BR: 2, TH: 2}, browsers: {Chrome: 1, Safari: 1, Mobile Safari: 2}, devices: {Mac: 2, iPhone: 2}, os: {Mac OS X: 2, iOS 18.7: 2}}}}

Notes: Sentry (org, project) has error events and session replays only; no spans/transactions/logs. Visitors are distinct replay IPs (user.id is null); sessions are replays (sampling unknown). Days bucketed by UTC replay startedAt. GB counts are derived as day total minus FR, DE, US, BR, TH and other-country replays. Pages are counts of replays containing the URL, not page views. No referrer, purchase, revenue, PDF, outbound or bot data. Dropped error events (client_discard/event_processor): 4, 9 and 2 on 15, 16 and 17 Nov.

Microsoft Clarity

Window	Window used	Metrics
W1	2026-11-15 00:00-23:59:59 UTC	{sessions: 77, distinct_users: 75, page_views: 98, pages_per_session: 1.27, new_sessions: 75, new_users: 74, returning_sessions: 2, returning_users: 1, countries_sessions: {United States: 26, United Kingdom: 17, Germany: 14, France: 10, Singapore: 10, Thailand: 0, Brazil: 0}, countries_users: {United States: 25, United Kingdom: 16, Germany: 14, France: 10, Singapore: 10}, sources_sessions: {clicklab.privatrak.com: 23, Direct: 20, google: 14, www.reddit.com: 8, chatgpt.com: 6, duckduckgo.com: 5, news.ycombinator.com: 4, Newsletter: 3, www.perplexity.ai: 2, www.linkedin.com: 1, bing: 1}, utm: {November-Launch/Newsletter/email: 3, forms-us/google/cpc: 2}, …}
W2	2026-11-16 00:00-23:59:59 UTC	{sessions: 134, distinct_users: 128, page_views: 176, pages_per_session: 1.31, new_sessions: 134, new_users: 128, returning_sessions: 0, returning_users: 0, countries_sessions: {United States: 76, United Kingdom: 25, Germany: 13, France: 10, Singapore: 10, Thailand: 0, Brazil: 0}, countries_users: {United States: 76, United Kingdom: 19, Germany: 13, France: 10, Singapore: 10}, sources_sessions: {clicklab.privatrak.com: 53, google: 38, Direct: 22, www.reddit.com: 10, Newsletter: 9, chatgpt.com: 8, duckduckgo.com: 4, news.ycombinator.com: 4, www.perplexity.ai: 2, bing: 1, www.linkedin.com: 1}, utm: {November-Launch/Newsletter/email: 9, forms-us/google/cpc: 2}, …}
W3	2026-11-17 00:00 - 2026-11-18 23:59:59 UTC	{sessions: 112, distinct_users: 108, page_views: 128, per_day: {2026-11-17: {sessions: 76, users: 74, page_views: 88, bounce_rate_pct: 92.11, avg_session_duration_s: 22.39}, 2026-11-18: {sessions: 36, users: 36, page_views: 40, bounce_rate_pct: 94.44, avg_session_duration_s: 14.38}}, new_sessions: 110, new_users: 108, returning_sessions: 2, returning_users: 2, countries_sessions: {United States: 31, United Kingdom: 27, France: 25, Germany: 18, Singapore: 10, Thailand: 1, Brazil: 0}, sources_sessions: {clicklab.privatrak.com: 43, Direct: 19, www.reddit.com: 11, www.linkedin.com: 10, chatgpt.com: 9, google: 8, duckduckgo.com: 6, news.ycombinator.com: 5, www.perplexity.ai: 4, bing: 2, Newsletter: 2, t.co: 1, …}, utm: {November-Launch/Newsletter/email: 2, forms-us/google/cpc: 2}, devices: {PC: 112}, …}
W4	2026-11-19 00:00-23:59:59 UTC	{sessions: 27, distinct_users: 26, page_views: 31, pages_per_session: 1.15, new_sessions: 26, new_users: 25, returning_sessions: 1, returning_users: 1, countries_sessions: {Thailand: 17, United States: 6, France: 4, United Kingdom: 0, Germany: 0, Singapore: 0, Brazil: 0}, countries_users: {Thailand: 16, United States: 6, France: 4}, sources_sessions: {clicklab.privatrak.com: 15, Direct: 10, google: 3, news.ycombinator.com: 1}, utm: {forms-us/google/cpc: 2}, …}
W5	2026-11-20 00:00 UTC to time of query (day still in progress)	{sessions: 17, distinct_users: 16, page_views: 18, pages_per_session: 1.06, new_sessions: 15, new_users: 15, returning_sessions: 2, returning_users: 1, countries_sessions: {France: 7, United Kingdom: 5, United States: 4, Thailand: 1, Germany: 0, Singapore: 0, Brazil: 0}, countries_users: {France: 7, United Kingdom: 4, United States: 4, Thailand: 1}, sources_sessions: {clicklab.privatrak.com: 10, Direct: 2, www.linkedin.com: 2, t.co: 1, www.perplexity.ai: 1, news.ycombinator.com: 1}, utm: {}, …}
W6	2026-11-17 00:00 - 2026-11-20 (to time of query) UTC	{sessions: 156, distinct_users: 148, page_views: 177, per_day: {2026-11-17: {sessions: 76, users: 74, page_views: 88}, 2026-11-18: {sessions: 36, users: 36, page_views: 40}, 2026-11-19: {sessions: 27, users: 26, page_views: 31}, 2026-11-20: {sessions: 17, users: 16, page_views: 18}}, new_sessions: 151, new_users: 148, returning_sessions: 5, returning_users: 4, countries_sessions: {United States: 41, France: 36, United Kingdom: 32, Thailand: 19, Germany: 18, Singapore: 10, Brazil: 0}, sources_sessions: {clicklab.privatrak.com: 68, Direct: 31, www.linkedin.com: 12, google: 11, www.reddit.com: 11, chatgpt.com: 9, news.ycombinator.com: 7, duckduckgo.com: 6, www.perplexity.ai: 5, t.co: 2, bing: 2, Newsletter: 2, …}, utm: {November-Launch/Newsletter/email: 2, forms-us/google/cpc: 4}, devices: {PC: 141, Mobile: 15}, …}

Hourly: {H1: {2026-11-17T23:00Z_users: 2, 2026-11-17T23:00Z_sessions: 2, 2026-11-18T00:00Z_users: 6, 2026-11-18T00:00Z_sessions: 6, distinct_users_both_hours: 8, users_in_both_hours: 0, double_counting: none: no user appeared in both hours, so repeat-visitor de-duplication could not be tested}, H2: {2026-11-19T07:00Z_sessions: 17, 2026-11-19T07:00Z_users: 16, countries: {Thailand: 17}, breakdown: {Mobile/MobileSafari/iOS: {sessions: 15, users: 14}, PC/Safari/MacOSX: {sessions: 1, users: 1}, PC/Chrome/MacOSX: {sessions: 1, users: 1}}}}

Notes: Clarity natural-language dashboard query tool; non-bot traffic, UTC as stated by the tool. Source counts are per page view and exceed session totals. W3/W6 country, device, entry and exit counts are sums of daily rows (they match the window session totals). /lab element-level click counts look inflated (Save draft errors exactly 3x the daily totals). No query strings stored. Purchase revenue and Plan selected not available. Brazil absent. Bot Activity (CDN) not connected. Documentation tool returned HTTP 500 twice.

Appendix H: The AI and app rounds through the MCP servers

20 Nov 2026, 12:20-12:45 UTC, one headless assistant per server, read-only, one brief for all servers (ground truth of 11:44-12:15 UTC given in the brief). Below is each assistant's closing JSON: what it found and how, and what it did not find. IP addresses removed. GA4's standard reports had not processed 20 Nov after 05:59 UTC at the time.

Privatrak

What	How	Numbers
ChatGPT-User fetches (/ and /article)	AI services report: ChatGPT 'read for an answer' (server-side), not counted as visitors	answer_fetches 2 (/ 1, /article 1); visitors 0
Claude-User fetch /article	AI services report: Claude 'read for an answer' (server-side), not counted as visitors	answer_fetches 1 (/article); visitors 0
iPhone in-app visits (app-slack, app-chatgpt, app-messages)	Normal page views by people (automated=false), via values present, no referrer on landing views; source Direct or unknown; utm_source=chatgpt.com recorded on the page view but not credited (no ChatGPT visitor, no campaign row)	15 pageviews 11:00-12:59 (/article 6, /product 3, /pricing 3, /contact 2, /app 1); via values 1 pageview each; Direct row has 2 visitors landing on /article; ChatGPT visitors 0
Measurement visits weight-ignore / weight-accept	Page views flagged automated=true (left out of counts of people)	6 automated pageviews in 12:00 hour (/ 2, /article 2, /pricing 2); via values 1 pageview each
Other: ChatGPT search crawler	AI services report search_crawler_requests (likely OAI-SearchBot, not in the ground truth)	1 request

Not found:

- Claude in Chrome visit (/?via=claude-in-chrome, /pricing, /contact): no via value, no / pageview, 0 automated pageviews in 11:00 hour
- Gemini fetch ('Google' user agent, /article?via=gemini): not under any AI service, no unconfirmed crawler
- WhatsApp link preview: the All crawlers / link previews view is not exposed by any MCP tool
- Apple link preview (3 URLs): the All crawlers / link previews view is not exposed by any MCP tool
- Hourly timing for AI fetches: the AI services report has no hourly breakdown

Notes: Project 'Click lab' (UTC). The AI services report has server_reporting true but server_data_from 2026-11-21, which contradicts the 3 reads it counts for 20 Nov. No page views between 05:00 and 10:59; the Perplexity visitor and 5 other automated page views are from the 04:00 hour, before the window. The iPhone visits seem to have merged into 2 daily visitors (same device/network hash), so the ChatGPT-tagged visit got no source credit (inference).

Matomo Cloud

What	How	Numbers
ChatGPT-User fetch 11:44 (/article?via=chatgpt and /)	AI-chatbot request via server-side bot tracking; labelled 'ChatGPT' in BotTracking.getAIChatbotsRealTime; no visit	2 requests, 2 unique page URLs; getTopPageUrlsRealTime: /article?via=chatgpt 1, / 1
Claude-User fetch 11:47 (/article?via=claude-code-webfetch)	AI-chatbot request labelled 'Claude' (claude.ai); no visit	1 request, 1 unique page URL
iPhone 11:56 WhatsApp session (via=app-slack) and 11:59 Messages session (via=app-messages)	Joined into one human visit idVisit 134; source direct; no campaign; not flagged as an AI agent	1 visit, 11 actions, 3 min 19s, Mobile Safari 27.2, iOS 27.2, Thailand
iPhone 11:58 session (via=app-chatgpt, utm_source=chatgpt.com)	Human visit idVisit 135; source type ai, name ChatGPT; no campaign; utm_source not in the stored URL	1 visit, 4 actions, 19s, Mobile Safari 27.2, Thailand

Not found:

- Gemini 'Google' user agent fetch 12:05 (/article?via=gemini)
- WhatsApp/[IP address removed] link preview 11:56
- Apple link preview 11:58-11:59 (app-whatsapp, app-chatgpt, app-messages)
- Claude in Chrome visit 11:49 (/?via=claude-in-chrome, /pricing, /contact)
- Two 12:13 measurement visits (via=weight-ignore, via=weight-accept)

- Any campaign for 20 Nov after 10:00
- Any visit flagged as an AI agent (AIAgents)

Notes: Day reports for 20 Nov are stale (VisitsSummary 7 visits, 17 actions, the same as the 04:02-05:01 visits; BotTracking.get 0 requests; AIAgents 0 agent visits, 7 human visits; Referrers.getAIAssistants only Perplexity, 1 visit at 04:08). Segmented requests returned zeros or the same old data. The figures here come from the live visitor log and the real-time BotTracking reports (lastMinutes=720). Live.getCounters over 720 min: 9 visits, 32 actions = 7 earlier visits plus 2 after 10:00. Matomo joined two separate iPhone sessions into visit 134.

PostHog

What	How	Numbers
ChatGPT-User fetch 11:44	$http_log only; $virt_traffic_type=AI Agent, category ai_assistant, bot ChatGPT / OpenAI; not a visitor	2 events: /article?via=chatgpt 11:44:48, / 11:44:50
Claude-User fetch 11:47	$http_log only; AI Agent / ai_assistant / Claude User / Anthropic; not a visitor	1 event /article?via=claude-code-webfetch 11:47:10
Gemini fetch (UA 'Google') 12:05	$http_log only; classified Regular/regular, $virt_is_bot=False (not detected); no pageview	1 event /article?via=gemini 12:05:15, United States
WhatsApp link preview 11:56	$http_log only; Bot / social_crawler / WhatsApp / Meta	1 event /article?via=app-slack, status 206, 11:56:39
Apple link preview (facebookexternalhit UA) 11:58-11:59	$http_log only; Bot / social_crawler, named 'Facebook' / Meta (not Apple)	6 events: app-whatsapp 2, app-chatgpt 2, app-messages 2
Claude in Chrome 11:49	Counted as a normal visitor: $pageview + session, channel Direct, referrer $direct, Chrome/Mac OS X Desktop, geo Germany; $virt_is_bot=False; $http_log Regular	3 pageviews, 2 autocapture, 3 pageleave, 1 session; 3 Regular $http_log
iPhone ChatGPT in-app visit 11:58	Visitor with session; referrer $direct, utm_source chatgpt.com, channel 'AI', no campaign; Mobile Safari iOS, Thailand	4 pageviews, 1 session, 1 $opt_in
iPhone WhatsApp-opened (via=app-slack) 11:56 and iMessage (via=app-messages) 11:59 visits	Only $http_log events labelled Regular; no pageviews/sessions, so no source/referrer/campaign	15 Regular iPhone $http_log events across the 3 iPhone visits
Measurement visits 12:13 (weight-ignore, weight-accept)	Only $http_log events labelled Regular, geo Germany; no pageviews	8 events incl. 2 /robots.txt, 12:12:55-12:14:13
Other bots/agents after 10:00	$http_log classification	Sentry Uptime 113 (Bot/monitoring, 10:27-12:19); OpenAI Search 1 (/robots.txt 11:45:18, AI Agent/ai_search); curl 1 (Automation 11:17:33); no-UA 2 (Automation 10:46:02); clicklab-cf-check 11 + clicklab-mask-check 1 + Chrome/141 4 labelled Regular

Not found:

- Any pageview/session for the AI assistant fetches or link previews (expected: no JS)
- Pageviews/sessions for the iPhone visit opened in WhatsApp (via=app-slack)
- Pageviews/sessions for the iPhone iMessage visit (via=app-messages)
- Pageviews/sessions for the 12:13 measurement visits (via=weight-ignore, via=weight-accept)
- Any bot/AI-agent flag on the Claude in Chrome visit
- Bot classification of the Gemini 'Google' user agent
- Any WhatsApp/iMessage source or any utm_campaign in recorded sessions

Notes: Project UTC. Window totals: 169 $http_log, 7 $pageview, 6 $pageleave, 6 $autocapture, 1 $opt_in, 2 sessions. $http_log carries every request (humans too) with $virt_traffic_type/$virt_bot_name labels. Claude in Chrome and 12:13 visits geolocated to Germany, not Thailand. Only 2 of 6 JS visits produced browser events; a single $opt_in suggests a consent gate, but the data does not confirm it.

Mixpanel

What	How	Numbers
ChatGPT-User fetch 11:44 (/article?via=chatgpt, /)	Server-side $mp_web_page_view with $mp_raw_user_agent 'ChatGPT-User/1.0'; distinct_id crawler-[id]; no bot/AI label; counted as a user; Marketing Channel 'Direct'; Amsterdam NL	2 page views (11:44:48, 11:44:50), 1 distinct ID

What	How	Numbers
Claude-User fetch 11:47 (/article?via=claude-code-webfetch)	Server-side $mp_web_page_view, UA 'Claude-User (claude-code/2.1.323; …)'; distinct_id crawler-[id]; no bot label; Channel 'Direct'; Berlin DE	1 page view (11:47:10), 1 distinct ID
Gemini 'Google' fetch 12:05 (/article?via=gemini)	Server-side $mp_web_page_view, UA 'Google'; distinct_id crawler-[id]; no bot label; Channel 'Direct'; US	1 page view (12:05:15), 1 distinct ID
Apple link preview 11:58-11:59 (via=app-whatsapp, app-chatgpt, app-messages)	Server-side $mp_web_page_view, UA 'Mac OS X 10_11_1 … facebookexternalhit/1.1 Facebot Twitterbot/1.0'; one distinct_id crawler-[id]; no bot label; Channel 'Direct'; Bangkok TH	6 page views (2 per via value), 1 distinct ID
iPhone visit 11:58 via=app-chatgpt&utm_source=chatgpt.com	Browser-tracked (mp_lib web) normal visitor $device:[id], Mobile Safari/iOS, iPhone, Bangkok TH; utm_source=chatgpt.com, $initial_referrer $direct, no referrer, no utm_campaign/medium; Marketing Channel 'Other Advertising'	3 page views (/article?via=…, /article, /pricing; /product missing), 3 clicks, 1 $opt_in
Measurement visits 12:13 (via=weight-ignore, via=weight-accept)	Browser-tracked normal visitors, Chrome 153 Mac OS X, Channel 'Direct', $initial_referrer $direct; geolocated Berlin, Germany (not Thailand); session replay events present; weight-accept has $opt_in + click	6 page views (3 each), 2 distinct IDs
Totals 20 Nov 10:00-24:00 UTC	Insights query on $mp_web_page_view filtered $time since 10:00, broken down by mp_lib	19 page views from 7 unique distinct IDs: 10 page views/4 IDs server-side (crawler-), 9/3 browser (web); sessions metric also returned 19, which looks unreliable

Not found:

- WhatsApp/[IP address removed] link preview 11:56
- Claude in Chrome agent visit 11:49 (/?via=claude-in-chrome, /pricing, /contact): no events at all
- iPhone visit 11:56 via=app-slack (in WhatsApp)
- iPhone visit 11:59 via=app-messages
- /product page view of the 11:58 ChatGPT iPhone visit
- Any bot/crawler/AI-agent classification property or label
- Any campaign value (utm_campaign) on any event

Notes: Only project: Privatrak. Event times match the UTC log. Crawler requests show up only as server-side $mp_web_page_view events, identifiable by the 'crawler-' distinct_id prefix and $mp_raw_user_agent; Mixpanel counts them as users with Marketing Channel 'Direct'. The ChatGPT in-app visit is attributed via utm_source=chatgpt.com to 'Other Advertising', not to an AI or referral channel. No other bot-like traffic after 10:00; no events at all between 04:09:46 and 11:44:48. Measurement visits geolocated to Germany/Berlin. Two ad-hoc Insights query links were returned (ids 9dd07dd1, 59ebac9d); apparently unsaved, nothing else created or changed.

Plausible

What	How	Numbers
Claude in Chrome agent visit (11:49 UTC)	Counted as a normal visitor/visit/pageviews; Desktop, Chrome 157.0, Mac, country Germany (not Thailand); source Direct / None, channel Direct; no bot flag	1 visitor, 1 visit, 3 pageviews (/, /pricing, /contact), entry /, visit_duration 40s, bounce_rate 0
iPhone in-app visits (11:56, 11:58, 11:59 UTC)	Merged into one visitor and one visit; Mobile, Safari 27.2, iOS, Thailand; source/referrer Direct / None, channel Direct, utm_source/medium/campaign (not set); via= not visible (query strings dropped, event:props:via = (none))	1 visitor, 1 visit, 15 pageviews (/article 6, /product 3, /pricing 3, /contact 2, /app 1), entry /article, visit_duration 199s, bounce_rate 0
Site totals 20 Nov 10:00-24:00 UTC	Pageviews plus goals Visit /contact (2 visitors, 3 events) and Visit /pricing (2 visitors, 4 events)	2 visitors, 2 visits, 18 pageviews, 18 events; hourly buckets labelled 18:00 (2 visitors, 15 pageviews) and 19:00 (1 visitor, 3 pageviews, Mobile)

Not found:

- ChatGPT-User fetch 11:44 (/article?via=chatgpt and /)
- Claude-User fetch 11:47 (/article?via=claude-code-webfetch)
- Gemini 'Google' fetch 12:05 (/article?via=gemini)
- WhatsApp/[IP address removed] link preview 11:56
- Apple link preview (facebookexternalhit/Mac OS X 10_11_1) 11:58-11:59
- Server-side Events API crawler posts
- Measurement visits 12:13 (/?via=weight-ignore, /?via=weight-accept)
- Any bot/crawler/AI-agent classification

- utm_source=chatgpt.com on the 11:58 iPhone visit
- Any WhatsApp/ChatGPT/iMessage source or referrer

Notes: Plausible keeps no bot traffic in its stats: the no-JS fetches and server-side posts are absent, which fits them being dropped as bots, but the API has no dropped/bot report to confirm it. Query strings are stripped from page paths, so via= cannot be seen. The three iPhone visits were merged into one Direct visit, so the 11:58 utm_source=chatgpt.com was lost. Claude in Chrome looks like a normal human visitor and is located in Germany, not Thailand. Hour labels 18:00/19:00 look like site local time (about UTC+7); that is an inference. The 12:13 measurement visits are not recorded.

Pirsch

What	How	Numbers
Claude in Chrome agent visit (11:49)	Counted as a normal visitor via the JS tracker; desktop Chrome on Mac, direct, located in DE not TH; no bot or agent flag	1 visitor, 1 session, 3 views (/, /pricing, /contact) in the 11:00 UTC hour
iPhone 11:56 visit opened in WhatsApp (via=app-slack)	Normal visitor, TH, iOS Safari 27.2, mobile; direct (no referrer, no UTM); entered /article, left on /app	1 visitor, 1 session, 6 views
iPhone 11:58 ChatGPT visit (utm_source=chatgpt.com) plus 11:59 iMessage visit	Merged into one session; referrer chatgpt.com, utm_source chatgpt.com, empty medium and campaign; the iMessage visit has no source of its own	1 visitor, 1 session, 9 views (/article 4, /pricing 2, /product 2, /contact 1); 6 views at 11:00 and 3 at 12:00 UTC
Measurement visits 12:13 (weight-ignore / weight-accept)	Both merged into one visitor/session; desktop Chrome Mac, direct, located in DE	1 visitor, 1 session, 6 views (/ 2, /article 2, /pricing 2)
Totals 20 Nov 10:00-24:00 UTC	Hourly view (time_of_day, UTC); only JS page views	5 visitors, 5 sessions, 24 views (11:00: 3 visitors/15 views; 12:00: 2 visitors/9 views; all other hours 0)

Not found:

- ChatGPT-User fetches 11:44 (/article?via=chatgpt, /)
- Claude-User fetch 11:47 (/article?via=claude-code-webfetch)
- Gemini 'Google' fetch 12:05 (/article?via=gemini)
- WhatsApp/[IP address removed] link preview 11:56
- Apple link preview (facebookexternalhit) 11:58-11:59 for app-whatsapp/app-chatgpt/app-messages
- Server-side crawler hits sent to hit/batch since ~10:26 (no visitor, view, event or bot statistic)
- via= query values (paths stored without query string)
- Any bot/AI-agent/crawler label or filter statistic (not offered by this MCP server)
- WhatsApp or iMessage as source/referrer

Notes: Domain id [id], domain timezone Asia/Bangkok, all queries run with timezone=UTC. The 24 views after 10:00 exactly match the 4 JS visits, so no server-side or link-preview hits were counted. Whether Pirsch filtered them as bots cannot be seen: this server has no bot or filter metric, and events and tags are empty. Pirsch merged visits: the iMessage visit merged into the ChatGPT-referred session, and the two measurement visits merged into one. Claude in Chrome and the measurement visits are located in Germany (de), not Thailand. utm_source chatgpt.com: 1 visitor (TH).

Cloudflare

What	How	Numbers
ChatGPT-User fetch 11:44	Edge HTTP request log only; verifiedBotCategory = AI Assistant; no Web Analytics page load	2 requests (/ and /article), NL, [network]
Claude-User fetch 11:47	Edge HTTP request log only; no bot category; no Web Analytics page load	1 request /article, DE, [network]
Gemini 'Google' fetch 12:05	Edge HTTP request log only; no bot category; no Web Analytics page load	1 request /article, BE, [network]
WhatsApp/[IP address removed] preview 11:56	Edge HTTP request log only; no bot category	1 request /article, status 499, TH
Apple link preview (facebookexternalhit UA) 11:58-11:59	Edge HTTP request log only; no bot category	6 requests /article (2 at 11:58, 4 at 11:59), TH

What	How	Numbers
Claude in Chrome 11:49	Web Analytics: normal visitor, desktop Chrome macOS, no referrer; edge log: no bot category	3 page loads, 1 visit; 19 edge requests; country DE
iPhone in-app visits 11:56-12:00	Web Analytics: normal visitors, entries with empty referrer (direct), later pages self-referred; no source or campaign visible	14 page loads, 3 visits, TH, MobileSafari iOS; 89 edge requests
Measurement visits 12:13	Web Analytics: every page load had no referrer, so each counted as its own visit	6 page loads, 6 visits, DE desktop Chrome macOS; 40 edge requests
Other bots	Edge log; verified categories where Cloudflare knows the bot	OAI-SearchBot 1 (/robots.txt, Search Engine Crawler); SentryUptimeBot 20 (Monitoring & Analytics); LogRocket-AssetCacher 3, Mouseflow 4, iOS NetworkingExtension 6 (404 icons), curl 1, clicklab-cf-check 8: no category

Not found:

- Any via= value or utm_source (query string not readable on the Free plan)
- Referrer in edge logs (field not readable on the Free plan)
- Source or campaign WhatsApp/ChatGPT/iMessage for the iPhone visits
- Bot or AI label for Claude-User, Gemini 'Google', WhatsApp, Apple preview, Claude in Chrome
- Firewall events (dataset not readable on the Free plan)
- Any Web Analytics page load from the no-JavaScript fetchers

Notes: Zone privatrak.com, Free plan; 202 edge requests 10:00-24:00, all for clicklab.privatrak.com, first at 11:17, none blocked. Web Analytics site clicklab.privatrak.com: 23 page loads, 10 visits on 20 Nov. Only ChatGPT-User got a verified 'AI Assistant' label. Claude in Chrome and the measurement visits are geolocated to DE (IP [network], also used by Claude-User), not TH. All AI-bot protections are off in the bot settings. The server-side forwarding does not apply to Cloudflare.

Microsoft Clarity

What	How	Numbers
Claude in Chrome browser agent (11:49)	Normal JS session, not flagged as bot; Chrome/MacOSX/PC; country Germany (not Thailand); source Direct, no referrer, channel Other; recording keeps ?via=claude-in-chrome	1 session, 3 page views (/?via=claude-in-chrome, /pricing, /contact), 2 clicks, 44 s
iPhone ChatGPT in-app visit (11:58, consent accepted)	Normal human session, MobileSafari/iOS/Thailand; Source chatgpt.com (from utm_source), referrer null, channel Other (not AITools), no campaign; recording keeps ?via=app-chatgpt&utm_source=chatgpt.com	1 session, 4 page views, 4 clicks
iPhone Slack link opened in WhatsApp (11:56, consent denied)	Each page split into its own sessions, 2 sessions per page; entry page Source Direct/no referrer, later pages internal referrer clicklab.privatrak.com (medium direct); no WhatsApp/Slack attribution, no campaign	12 sessions, 12 page views (6 pages x 2); 6 recordings
iPhone iMessage visit (11:59, consent denied)	Same per-page split, 2 sessions per page; entry Source Direct/no referrer, later pages internal; no iMessage attribution; last /pricing view missing	8 sessions, 8 page views (4 of 5 pages x 2); 4 recordings
Totals for 10:00-24:00 UTC	Dashboard analytics (JS tag)	MobileSafari 21 sessions/24 PV + Chrome 1 session/3 PV; bot sessions 0, bot PV 0

Not found:

- ChatGPT-User fetch 11:44 (/article?via=chatgpt and /)
- Claude-User fetch 11:47 (via=claude-code-webfetch)
- Gemini 'Google' fetch 12:05 (via=gemini)
- WhatsApp/[IP address removed] link preview 11:56
- Apple link preview 11:58-11:59 (via=app-whatsapp, app-chatgpt, app-messages)
- Server-side forwarded crawler requests (no CDN connected; Bot Activity all zero, list-ai-crawlers empty)
- Measurement visits 12:13 (via=weight-ignore, via=weight-accept)
- Last /pricing page view of the iMessage visit

Notes: No CDN is connected (list-connected-cdn-providers = []), so Bot Activity returns 0 requests. Only JS-run visits are recorded, and all are classified human; DNT did not stop recording. With consent denied, each page view became separate sessions, each counted twice. Country for the Claude in Chrome visit is Germany, not Thailand. The dashboard

removes query strings from page URLs; via= values appear only in recordings. Outside the window: 4 bot sessions at 04:xx UTC (3 Chrome/Linux France on /product, 1 ChromeMobile/Android US on /). Two attempts to list recordings filtered to Bot/Headless browsers returned HTTP 500.

LogRocket

What	How	Numbers
Claude in Chrome agent visit (via=claude-in-chrome)	Recorded as a normal session; desktop Chrome 157 / macOS; geo Germany/Berlin (IP [network]); no bot/automation/webdriver/DNT flag; recorded despite Do Not Track; empty referrer	1 session, 11:49:09 UTC, 40.6 s, pages / then /pricing then /contact
iPhone in-app visit via=app-slack (opened in WhatsApp)	Normal Mobile Safari 27 / iOS 18.7 session, Bangkok; no WhatsApp/Slack source or channel field; recorded despite consent decline	1 session, 11:56:57 UTC, 24.4 s, 6 pages (/article?via=app-slack, /article, /product, /pricing, /contact, /app); user 5b662b19
iPhone in-app visit via=app-chatgpt&utm_source=chatgpt.com	Normal Mobile Safari session, Bangkok; first-page referrer empty (direct); utm_source=chatgpt.com only kept as text in the URL, no campaign report; /product not recorded	1 session, 11:58:40 UTC, 18.0 s, pages /article?via=app-chatgpt&utm_source=chatgpt.com, /article, /pricing; user 4c7580bb
iPhone in-app visit via=app-messages	Normal Mobile Safari session, Bangkok; first-page referrer empty (direct); no iMessage source; same user ID as the app-slack visit; recorded despite consent decline	1 session, 11:59:48 UTC, 38.1 s, 5 pages (/article?via=app-messages, /article, /product, /contact, /pricing); user 5b662b19
Measurement visits via=weight-ignore and via=weight-accept	Normal Chrome 153 / macOS sessions, geo Germany/Berlin (IP [network]), empty referrer; LogRocket's AI session review mentioned 'automated: true' in the site's own tracking payload for weight-accept (not checked in the first 10 of its 29 network requests; not a LogRocket flag)	2 sessions, 12:12:58 and 12:13:38 UTC, each landing + /article + /pricing
Totals 20 Nov 10:00-24:00 UTC	Sessions only (no page-view, server/log, source or bot reports)	6 sessions, 5 distinct users; sessions per URL: /pricing 6, /article 5, /contact 3, /product 2, /app 1, each via= landing URL 1

Not found:

- ChatGPT-User fetch 11:44 (/article?via=chatgpt and /)
- Claude-User fetch 11:47 (/article?via=claude-code-webfetch)
- Google (Gemini) fetch 12:05 (/article?via=gemini)
- WhatsApp/[IP address removed] link preview 11:56
- Apple link preview (facebookexternalhit) 11:58-11:59 for via=app-whatsapp, via=app-chatgpt, via=app-messages
- Server-side or log events of any kind
- Any bot / crawler / AI-agent label
- WhatsApp, ChatGPT or iMessage source/referrer or campaign attribution
- /product page in the via=app-chatgpt session

Notes: LogRocket records sessions only when JavaScript runs, so the AI-assistant and link-preview fetches are missing entirely, not counted and not labelled. Its URL search for via=chatgpt, via=claude-code-webfetch, via=gemini and via=app-whatsapp returned 0 sessions. It has no server-side path and no bot report, and its metric filters can't match user-agent text, so user agents were checked session by session. All 6 sessions look like ordinary visitors. LogRocket ignored the consent decline and Do Not Track. Claude in Chrome and both measurement visits are placed in Germany/Berlin, not Thailand. No sessions were recorded between 10:00 and 11:49 UTC.

Sentry

What	How	Numbers
Claude in Chrome agent visit (via=claude-in-chrome)	Session replay [id], production, no bot/automation flag	1 replay, 3 page loads (/?via=claude-in-chrome, /pricing, /contact), 52 s, Chrome 157 Mac OS X, geo BR (Vitória da Conquista), IP [network], 45 network requests (8 failed), 0 errors
iPhone ChatGPT in-app visit (via=app-chatgpt&utm_source=chatgpt.com)	Session replay [id]; utm_source only visible inside the URL, no source/referrer/campaign field	1 replay, 3 page loads (/article?via=app-chatgpt&utm_source=chatgpt.com, /pricing, /product), 23 s, Mobile Safari 27.2, iOS 18.7, Bangkok TH; the second /article view from the server log is missing
Measurement visit via=weight-ignore	Session replay [id]	3 page loads (/?via=weight-ignore, /article, /pricing), 32 s, Chrome 153 Mac, geo BR, IP [network]
Measurement visit via=weight-accept	Session replay [id]	3 page loads (/?via=weight-accept, /article, /pricing), 30 s, Chrome 153 Mac, geo BR, IP [network]

Not found:

- ChatGPT-User fetch 11:44 (/article?via=chatgpt and /)
- Claude-User fetch 11:47 (/article?via=claude-code-webfetch)
- Gemini 'Google' fetch 12:05 (/article?via=gemini)
- WhatsApp/[IP address removed] link preview 11:56
- Apple link preview (facebookexternalhit, Mac OS X 10_11_1) 11:58-11:59 for via=app-whatsapp, app-chatgpt, app-messages
- iPhone visit via=app-slack 11:56 (consent declined)
- iPhone visit via=app-messages 11:59 (consent declined)
- Any server-side events: 0 spans/transactions and 0 logs in 30 days
- Any bot/AI-agent/crawler classification
- Any referrer, source or campaign field (utm only visible inside replay URLs)

Notes: the Sentry organisation, single project 'javascript'. Data comes only from the browser SDK (session replays; 0 error events in the last 2 days). Sentry has no server-side path for crawlers and no bot labelling. Claude in Chrome was recorded as a normal session despite Do Not Track. The consent-declined iPhone visits were not recorded; the consent-accepted ChatGPT in-app visit was. Sentry puts the Claude in Chrome visit and both weight visits in BR (IP [network]), not Thailand as in the server log. No bot-like activity on 20 Nov after 10:00 UTC; the only headless signal in 30 days is HeadlessChrome errors on 14 Nov.

Google Analytics 4

What	How	Numbers
ChatGPT-User fetch (server-side page_view)	Counted as an ordinary user and session, Unassigned / (not set), not marked as a bot; device 'smart tv', browser 'Mozilla Compatible Agent', Netherlands	1 session, 1 user, 2 page views (/article?via=chatgpt, /), 0 engaged
Claude-User fetch (server-side page_view)	Counted as an ordinary user and session, Unassigned, desktop, browser (not set), Germany; not marked as a bot	1 session, 1 user, 1 page view /article?via=claude-code-webfetch
Gemini 'Google' fetch (server-side page_view)	Counted as an ordinary user and session, Unassigned, desktop, browser (not set), no country; not marked as a bot	1 session, 1 user, 1 page view /article?via=gemini (12 UTC hour)
Apple link preview (server-side page_view)	All hits in one session and one user, desktop, Thailand, Unassigned, 0 engaged; not marked as a bot	5 page views recorded of 6 sent: app-whatsapp 2, app-chatgpt 2, app-messages 1
Claude in Chrome agent	Normal returning user, Direct (direct)/(none), desktop Chrome on Macintosh, Germany; not flagged as automated	1 session, 1 user (0 new), 1 engaged session, 3 page views, 10 events
iPhone ChatGPT in-app visit (consent accepted)	Source/medium chatgpt.com / ai-assistant, campaign '(ai-assistant)', channel 'AI Assistant'; mobile iOS Safari, Thailand	1 session, 1 new user, 1 engaged session, 3 page views (/product missing)
iPhone app-slack and app-messages visits (consent declined)	Still recorded, merged into one Direct session with landing page /article?via=app-slack; no WhatsApp or iMessage source, no campaign; mobile iOS Safari, Thailand	1 session, 1 user (0 new), 11 page views covering both visits
Measurement visits weight-accept and weight-ignore	Direct, desktop Chrome on Macintosh, Germany	2 sessions, 2 new users, 3 page views each
Extra session /?via=repro-privatrak-profile	scroll and user_engagement events only, empty landing page, (not set) source, Unassigned, desktop Chrome on Macintosh, Germany	1 session, 0 page views, 2 events

Not found:

- WhatsApp/[IP address removed] link preview (no server-side hit sent; no separate record)
- 6th Apple-preview page_view (5 of 6 visible)
- /product page view of the iPhone ChatGPT in-app visit
- Any bot, crawler or AI-agent classification (GA4 has no such dimension and no user-agent field)
- Any WhatsApp or iMessage source or referrer
- Any data in 10:00-11:00 UTC or after 13:00 UTC on 20 Nov

Notes: Property timezone is America/Los_Angeles; all 20 Nov data is in property hours 03 and 04 (11-12 UTC). Server-side page_views show as ordinary users and sessions with source (not set) / Unassigned and no first_visit. GA4 placed the Claude in Chrome and measurement visits in Germany, not Thailand. The landing-page dimension drops utm_source but the page address keeps it.