Engineer Software

Built first-party error monitoring and tracing

Built first-party error monitoring and OpenTelemetry tracing rather than buying them — payload sanitising, spike and regression detection, symbolication and a synthetic heartbeat — behind 11 operator views.

2025

11

operator views over monitoring we built, not bought

Situation. The difference between a platform that is up and a platform that is working is whether anyone would know. An error a user hits at eleven at night, on a page nobody tests, is invisible unless something goes and collects it. The usual answer is to buy a hosted error tracker, which is a good answer — and it also means the platform's own errors, stack traces and user context leave for a third party.

Task. Errors and traces had to be collected, grouped and made actionable, without the platform's internals leaving the platform.

Action. Two pieces got built. OpenTelemetry handles tracing over OTLP, so a slow request can be followed across the frontend, the API and the database rather than guessed at. Alongside it sits an in-house error pipeline — an errmon service and an ingest service — that sanitises payloads before storage, groups errors into recurring problems rather than a flat list, detects spikes and regressions with a cooldown so one bad deploy does not page anyone forty times, symbolicates minified frontend stack traces back into readable code, and runs a synthetic heartbeat to prove that the pipeline itself is alive. It all lands in the database as error events, error groups, an inbox, API latency and stack samples, and it surfaces through 11 operator views, including one for service level objectives.

Result. Errors turn into a queue that someone can work through, and a regression announces itself instead of being discovered by a user. Building rather than buying cost real time and means this is one more thing to maintain — a bought tracker would have been running the same afternoon. What it bought was that nothing sensitive leaves, and that the alerting rules fit this platform rather than a generic one.

Bring this experience to your project

Use “Built first-party error monitoring and tracing” as a starting point for a similar challenge in your organisation. The services behind this work are available for your project. The part users never see: where the data lives, what the rules are, and how other systems are allowed to talk to it.

Explore our services Get in touch →

Look behind the result

Read the situation, decisions and result in this example. We can discuss which parts transfer to your constraints and which need another approach. Built first-party error monitoring and tracing — 11 operator views over monitoring we built, not bought

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Would you know if your app broke tonight?

Talk through your project with the engineer responsible for delivery. We agree the scope, price basis and handover in writing before work begins.

Role context: Site Reliability Engineer. It draws on Backend Engineering, DevOps, Infrastructure, Reliability & Backups, Monitoring & Observability and Security. And while you are here, we are rather good at Backend & API Development, DevOps & CI/CD Automation, Site Reliability & Monitoring and Custom AI Agent Development.

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One piece of **a longer record** — and it is all on this site.

Every entry is written the same way: the situation, the task, what we did and what changed.

See the whole record

Define the improvement you need

Describe the workflow, the existing interfaces and the users who need the change. We can define a testable delivery and a handover that lets your team maintain it.

See what it costs Get in touch →

Would you know if your app broke tonight?

Ask about the decisions behind “Built first-party error monitoring and tracing”. You will speak with the people who can explain the work and assess your own project.

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Contact card

Carefully Crafted With Love by D.

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