SENTRY

Monitoring Critical E-commerce Experiences: Developer's Checklist

Introduction

Nothing quite matches the terror of a checkout error during a period of peak traffic. Whether it's during the holidays or a seasonal sale, there's never a good time for errors or performance degradations to show up. When they do, it's critical to get immediate answers about what's failing and how to fix it.

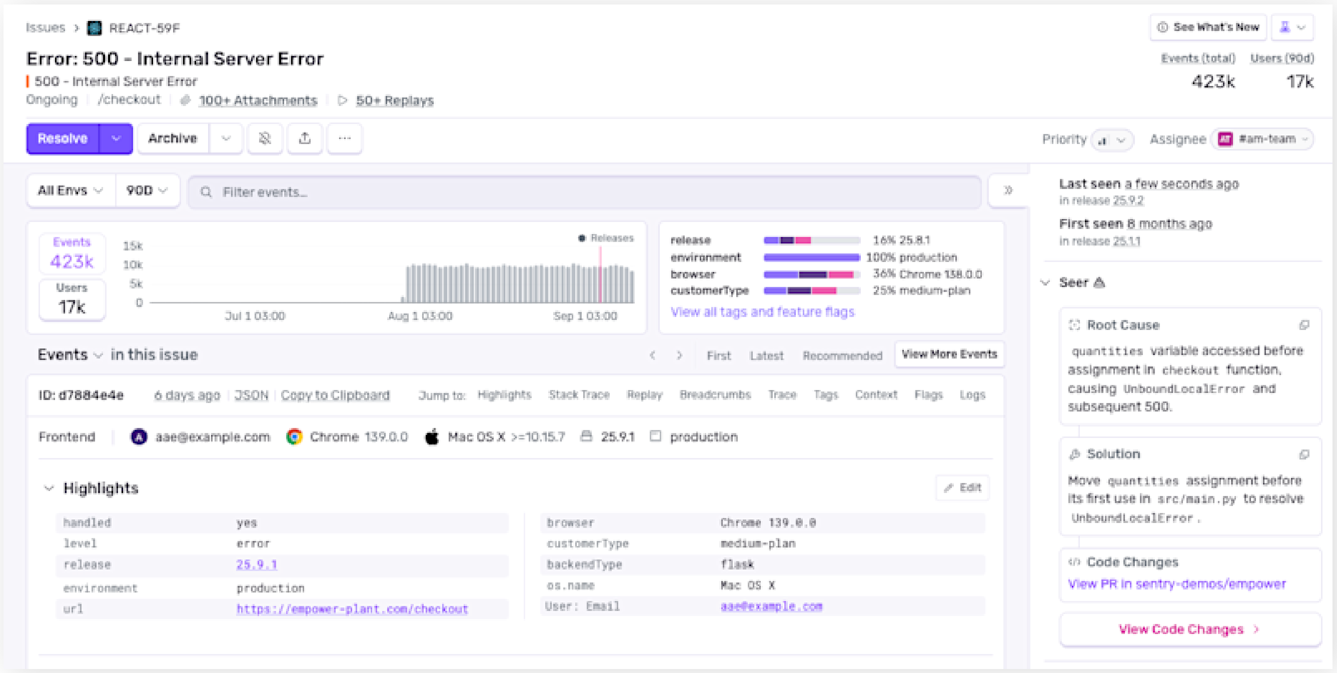
E-Commerce Application Monitoring Readiness

Setting up comprehensive error and performance monitoring is one way to ensure that you're prepared to respond quickly when inevitable bugs and performance issues crop up. The key is having these systems running and proven during normal traffic, so when you experience high traffic, you're not scrambling to figure out what's going on. Here's your e-commerce monitoring checklist, with the steps you need to take to survive (or even thrive) during peak shopping periods:

- ✓ **Implement error monitoring:** Triage and fix issues with detailed error context and debugging information.
- ✓ **Prioritize fixes with smart error alerting:** Configure alerts that reduce noise and surface revenue-threatening issues.
- ✓ **Collect user feedback and watch session replays:** Capture session replay data and real time user feedback when customers encounter problems.
- ✓ **Optimize site performance:** Monitor and identify performance bottlenecks using distributed tracing and logs before they impact conversion rates.
- ✓ **Eliminate bugs before they ship:** Keep errors from reaching production in the first place.

Implement error monitoring

Every error in your critical experiences like sign-in and checkout is potential revenue walking out the door. The first step here is making sure you're capturing errors in prod so you don't have to wait for customer complaints to tell you what's wrong. Use Sentry's error monitoring to automatically track exceptions across your checkout and payment systems, complete with the context you need to fix issues quickly.



Error: 500 - Internal Server Error

500 - Internal Server Error

Ongoing | /checkout | 100+ Attachments | 50+ Replays

Events (total) 423k   Users (90d) 17k

Events 423k   Users 17k

release	16% 25.8.1
environment	100% production
browser	36% Chrome 138.0.0
customerType	25% medium-plan

Events in this issue

ID: d7884e4e   6 days ago | JSON | Copy to Clipboard

Frontend | aae@example.com   Chrome 139.0.0   Mac OS X >=10.15.7   25.9.1   production

Highlights

handled	yes	browser	Chrome 139.0.0
level	error	customerType	medium-plan
release	25.9.1	backendType	flask
environment	production	os.name	Mac OS X
url	https://empower-plant.com/checkout	User: Email	aae@example.com

Last seen a few seconds ago
in release 25.9.2

First seen 8 months ago
in release 25.1.1

Seer

Root Cause
`quantities` variable accessed before assignment in `checkout` function, causing `UnboundLocalError` and subsequent 500.

Solution
Move `quantities` assignment before its first use in `src/main.py` to resolve `UnboundLocalError`.

Code Changes
View PR in sentry-demos/empower

- **Prioritize what matters:** Grouped issues keep related failures together, so you can focus on high-impact errors like payment failures instead of sifting through noise.
- **Understand the full picture:** Get the connected context you need to understand what went wrong and why, with readable stack traces, tags, and breadcrumbs of user actions so you can see what happened leading up to an error.
- **Use AI and automation to resolve faster:** Use suspect commits to tie issues directly to the most likely commit and author. Sentry's AI agent Seer uses rich context to identify actionable issues in real-time and generate fixes automatically.

Prioritize fixes with smart error alerting

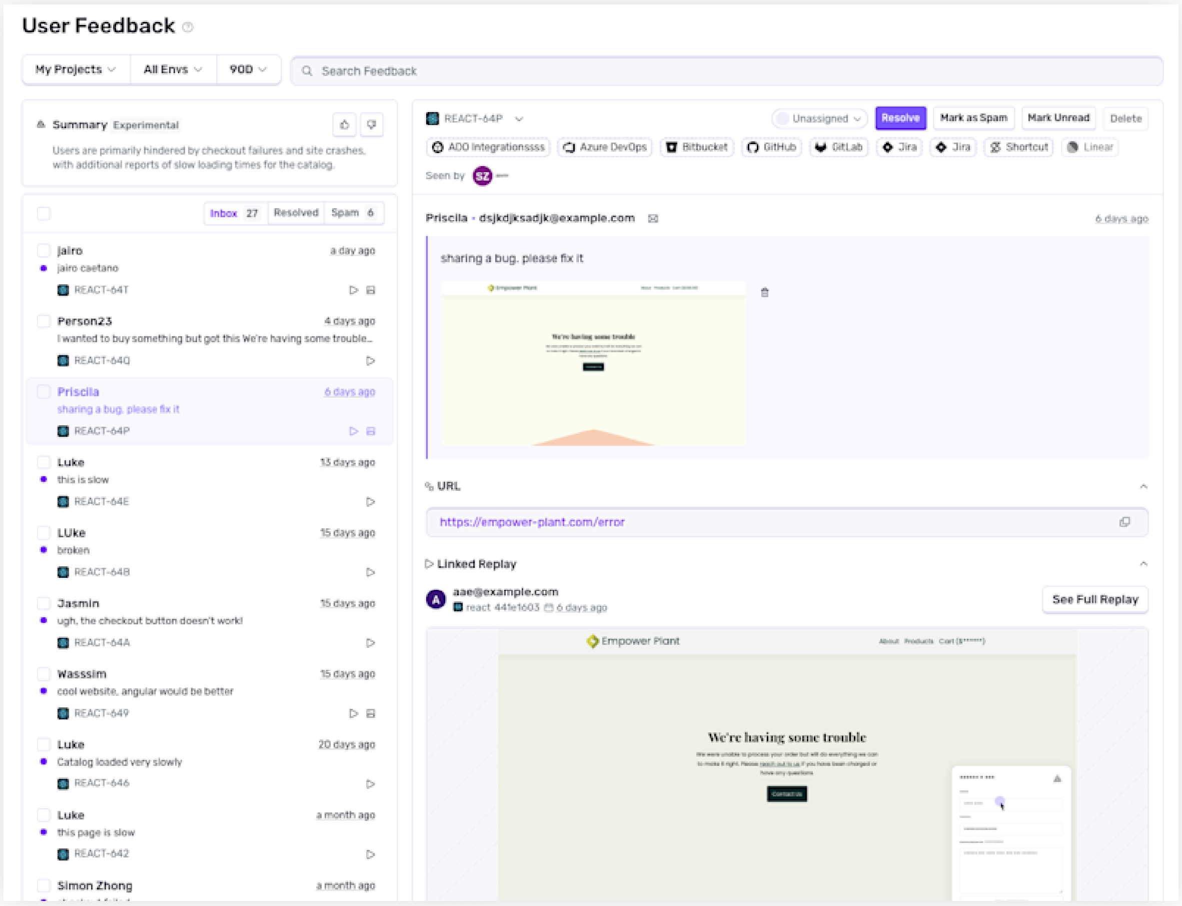
If you can't separate noise from critical issues, you risk missing the problems that actually cost you money. Sentry's Alerts are built to focus on user impact. With flexible rules and filters, you can cut through the noise and make sure the right people see the right problems fast.

- **Focus on impact:** Create alerts when issues match specific criteria (like when the triggering event is fatal), macro-level metrics cross specific thresholds (like when an issue was seen 100 times in 24 hours), or when an HTTP request doesn't return a successful response.
- **Adapt thresholds to traffic:** Pair fixed thresholds with dynamic thresholds to flag anomalies compared to historical baselines, so you catch problems even as traffic patterns shift.
- **Route alerts by severity:** Critical payment errors should page the on-call engineer immediately. Medium-severity issues might go to Slack. Environment filters prevent staging or dev errors from cluttering production alerts.

Done right, alerts help you see which fires are worth fighting first so you never miss the ones that are burning revenue.

Understand the user experience with session replays and user feedback

Most customers will just leave your site before telling you when something breaks. Sentry's Session Replay shows you a video-like playback of user interactions on your site, in relation to network requests, DOM events, and console messages. By combining Session Replay with the User Feedback Widget, which lets you collect feedback directly from end users, you can understand critical details about errors and the UX of your site.


User Feedback

My Projects | All Envs | 90D | Search Feedback

Summary Experimental

Users are primarily hindered by checkout failures and site crashes, with additional reports of slow loading times for the catalog.

Inbox 27 | Resolved | Spam 6

Jairo — a day ago
jairo caetano
REACT-64T

Person23 — 4 days ago
I wanted to buy something but got this We're having some trouble...
REACT-64Q

Priscila — 6 days ago
sharing a bug. please fix it
REACT-64P

Luke — 13 days ago
this is slow
REACT-64E

LUke — 15 days ago
broken
REACT-64B

Jasmin — 15 days ago
ugh, the checkout button doesn't work!
REACT-64A

Wasssim — 15 days ago
cool website, angular would be better
REACT-649

Luke — 20 days ago
Catalog loaded very slowly
REACT-646

Luke — a month ago
this page is slow
REACT-642

Simon Zhong — a month ago

REACT-64P | Unassigned | Resolve | Mark as Spam | Mark Unread | Delete

ADO Integrationssss | Azure DevOps | Bitbucket | GitHub | GitLab | Jira | Jira | Shortcut | Linear

Seen by SZ

Priscila · dsjkdjksadjk@example.com — 6 days ago

sharing a bug. please fix it

URL
https://empower-plant.com/error

Linked Replay
aae@example.com
react 441e1603 6 days ago
See Full Replay

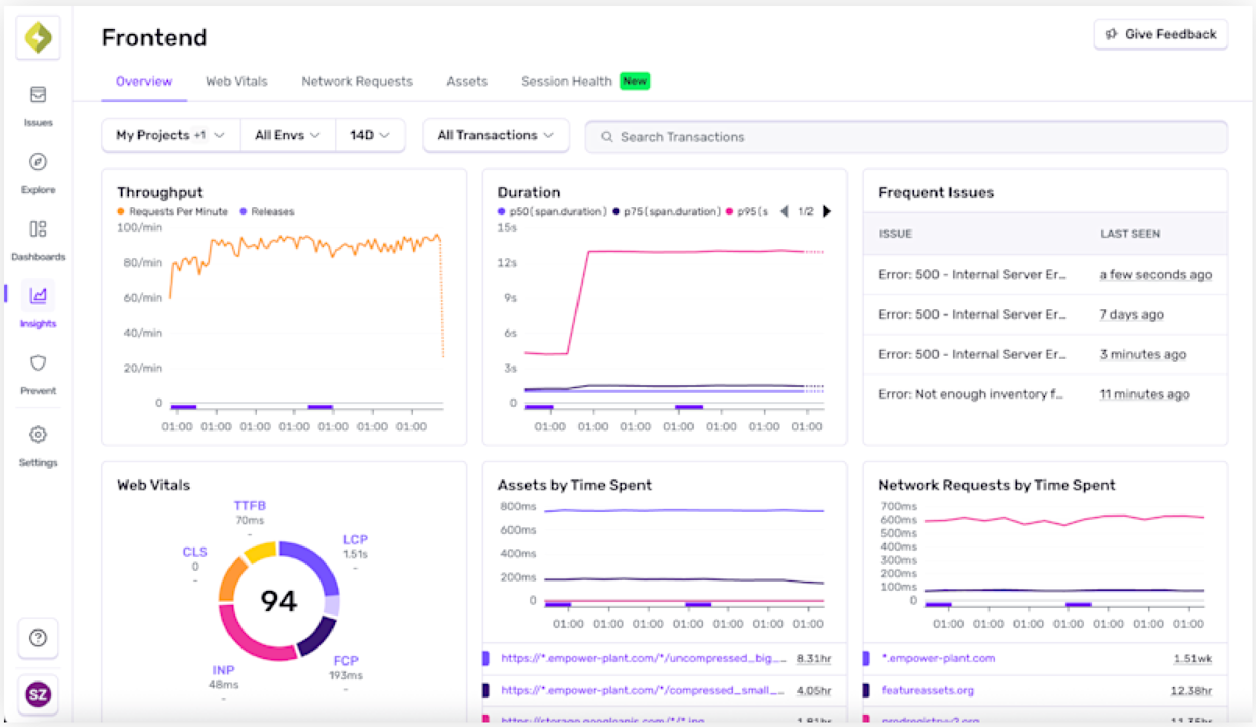
Empower Plant — About Products Cart
We're having some trouble

- **Use visual context to debug issues:** Replays show the exact steps that led to an issue, helping you reproduce bugs without guesswork or endless back-and-forth.
- **Connect feedback to real behavior:** User feedback submissions can be paired with replays to see what the customer experienced leading up to the submission.
- **Route feedback efficiently:** Critical problems like payment failures should go straight to engineers, while general design suggestions can wait for the next product review cycle.

Once you've fixed issues, keep feedback loops open. Replays and reports together give you a continuous view of user experience, so you can spot and resolve new frustrations before they cost you more customers.

Optimize site performance

A 100-millisecond delay can reduce conversions by 7%. During holiday traffic spikes, slow pages don't just frustrate shoppers – they push them directly to competitors. Real User Monitoring (RUM) data shows how performance issues like poor LCP and FCP directly impact abandonment rates when customers are trying to check out their cart full of limited-time product deals.



Frequent Issues

ISSUE	LAST SEEN
Error: 500 - Internal Server Er...	a few seconds ago
Error: 500 - Internal Server Er...	7 days ago
Error: 500 - Internal Server Er...	3 minutes ago
Error: Not enough inventory f...	11 minutes ago

https://*.empower-plant.com/*/uncompressed_big_...	8.31hr
https://*.empower-plant.com/*/compressed_small_...	4.05hr

*.empower-plant.com	1.51wk
featureassets.org	12.38hr

Start by capturing real-world performance data. Use Sentry's Real User Monitoring to track how actual shoppers experience your site during peak conditions, and head to Insights -> Frontend in Sentry to surface any metrics that fall outside recommended thresholds.

- **Review Time to First Byte (TTFB):** Drill into transactions causing slow initial responses by drilling into high-TTFB spans. Surface specific requests like database queries or third-party calls that delay the start of page rendering, so you can prioritize optimizations that actually improve user-perceived performance.

- **Pinpoint bottlenecks using distributed tracing:** Look at API performance, slow database queries, or problematic third-party scripts that are likely to experience degraded performance with higher traffic.
- **Use trace-connected logs for debugging and optimization:** Application and server logs are your ground truth during traffic spikes. Stream structured logs in real time (live-tailing) to spot anomalies, set up alerts on specific log patterns (e.g. repeated failed payment_status), and visualize trends over time with dashboards.
- **Optimize asset loading:** Cache static assets (images, JS, CSS) for faster repeat visits, and utilize lazy loading to reduce initial load times.

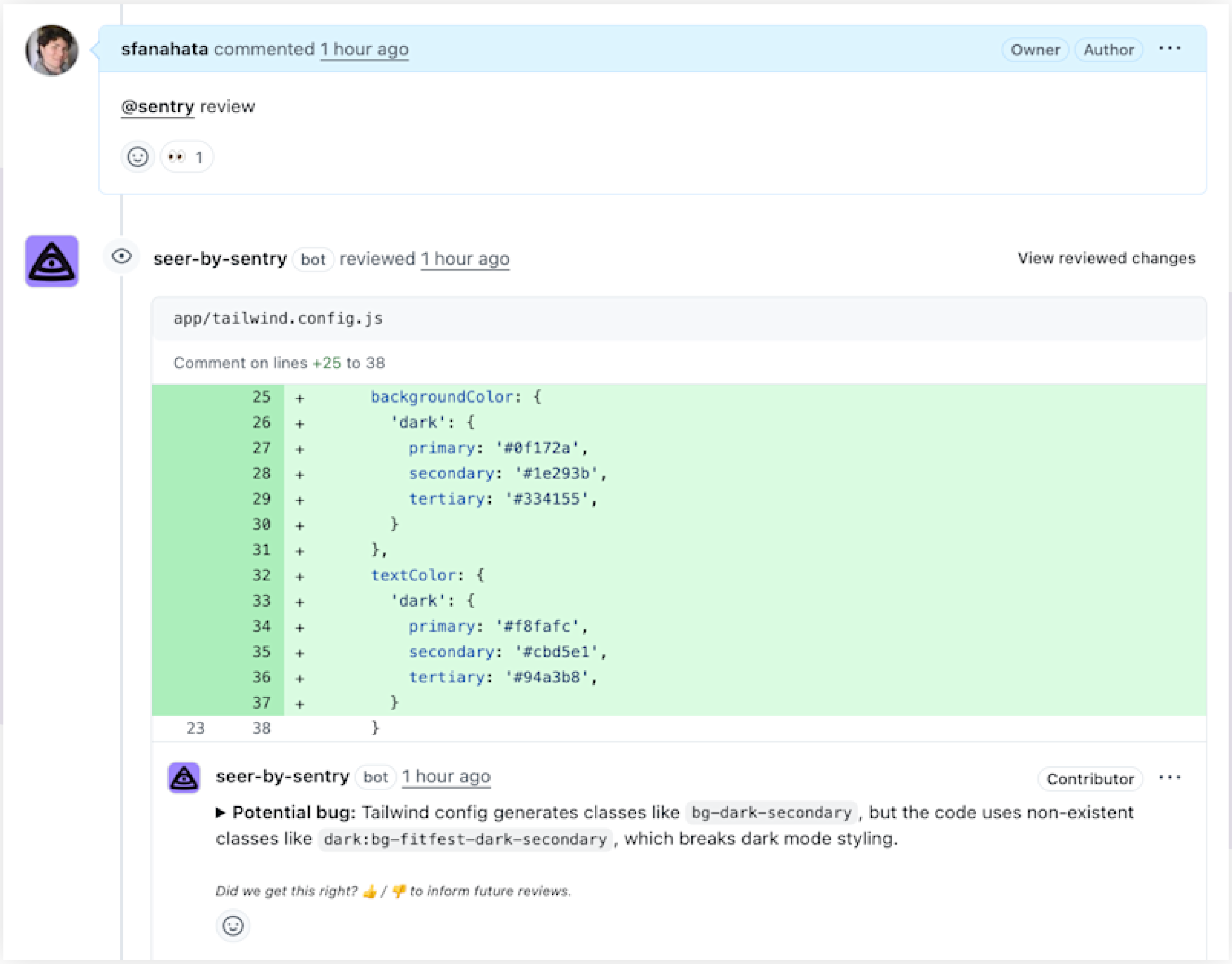
Once fixes are in place, validate by setting up metric alerts to compare before and after state.

Eliminate bugs before they ship

The best time to fix bugs is before they make it to prod. Manual code reviews are great, but when deadlines are breathing down your neck, thorough reviews can get whittled down to “LGTM” approvals.

Your team’s good, but nobody’s catching *everything*. AI can hunt down the edge cases humans miss and warn you before they blow up in prod.

When you create a pull request and set it to Ready for Review, Sentry AI code review will check for errors in your code. If no error is found, you will see a 🎉 emoji as a reaction to your PR description. Otherwise, it will add comments to your PR.



sfanahata commented 1 hour ago · Owner · Author

@sentry review

seer-by-sentry bot reviewed 1 hour ago · View reviewed changes

app/tailwind.config.js

Comment on lines +25 to 38

```
+        backgroundColor: {
+          'dark': {
+            primary: '#0f172a',
+            secondary: '#1e293b',
+            tertiary: '#334155',
+          }
+        },
+        textColor: {
+          'dark': {
+            primary: '#f8fafc',
+            secondary: '#cbd5e1',
+            tertiary: '#94a3b8',
+          }
         }
```

seer-by-sentry bot 1 hour ago · Contributor

▶ **Potential bug:** Tailwind config generates classes like `bg-dark-secondary`, but the code uses non-existent classes like `dark:bg-fitfest-dark-secondary`, which breaks dark mode styling.

Did we get this right? 👍 / 👎 to inform future reviews.

- **Predict errors:** Sentry's AI code review goes beyond standard PR review, pulling error context from Sentry and alerting you to high-impact bugs in your code.
- **Automate code review:** AI analysis identifies potential bugs, logical inconsistencies, and risky implementation patterns in critical code paths like checkout flows and payment processing.

AI-assisted review is here, and it actually plays nice with your workflow. Think of it as preventative debugging, so your next deploy doesn't turn into a production horror story.

Stay on top of your critical user experiences

The tools and practices in this guide give you the visibility you need when everything's on fire and customers are trying to spend money on your site.
Set this stuff up during normal traffic when you have time to test and fix issues. Trying to implement monitoring during Black Friday or a half-off sale is like trying to install smoke detectors while your house is burning down.

When problems inevitably happen during peak shopping, you'll know exactly what's broken and how to fix it before your revenue disappears. And if it's too late for this season........there's always next year.