

OPTIMIZING SHOPWARE 6 CHECKOUT PERFORMANCE WITH CALLGRAPH TRACEPOINTS











This case study explores how the performance of the checkout process in the Shopware 6 store of Bär Shoes was significantly improved using Tideways profiling tools.

ecommlab is a Tideways partner agency that unlocks e-commerce potential by turning customer relationships into partnerships and leading digital projects to success. With expert teams and global reach, they manage projects of any size efficiently.



ecommlab's client BÄR shoes have been synonymous with footwear for confident, independent-minded people who value health, well-being and comfort – without compromising on contemporary design. since 1982. Tideways is an Application-Performance-Monitoring (APM) solution with built-in profiler and automated error tracking. Tideways helps you through detailed insights about your site's performance from fronted and backend to background processes.







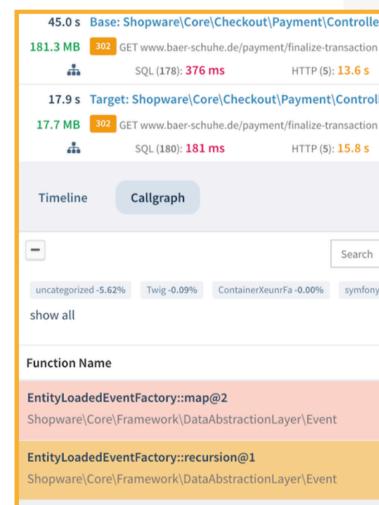
COLLABORATION

Performance Insights

Andrey from <u>Ecommlab</u> contacted Tideways to ask about a strategy to get performance insights from Tideways into Shopware 6 checkout. The store of our joint customer "<u>Bär Schuhe</u>" was slow for customers during the order confirmation process.

Technology

Initial timeline profiling traces did not reveal clear bottlenecks. To gain deeper insights, function-level data was collected with a **callgraph tracepoint**, uncovering that a custom plugin responsible for connecting the store to its ERP system consumed 66% of a 45-second request and generated approximately 50,000 database objects.



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RESULTS

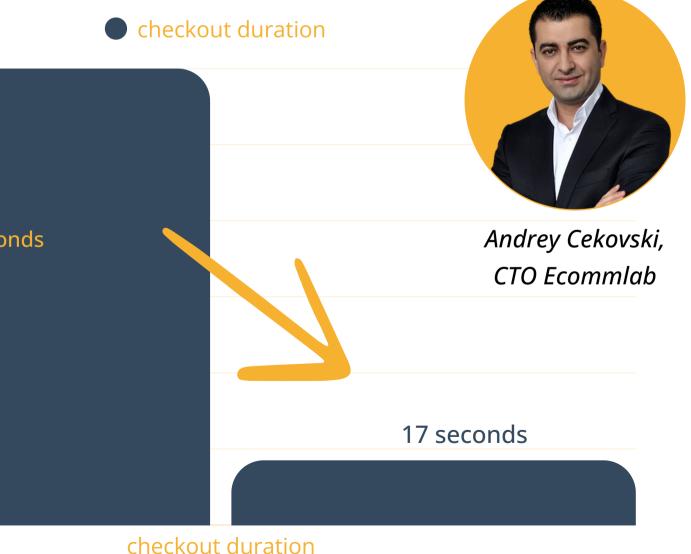
checkout-time reduced by 85%

After removing the problematic code line, the optimization was deployed to production, resulting in a **reduction of the order completion time from up to two minutes to a maximum of 17 seconds**. This improvement was primarily attributed to the elimination of the 50,000 unnecessary database objects, accounting for a 16-second time savings.

This case study demonstrates the effectiveness of using profiling tools like Tideways to identify and address significant performance bottlenecks, leading to substantial enhancements with minimal code changes.

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Tideways' profiler allowed us to focus on the most significant bottlenecks first, reducing the overall time spent on optimization.



SUMMARY

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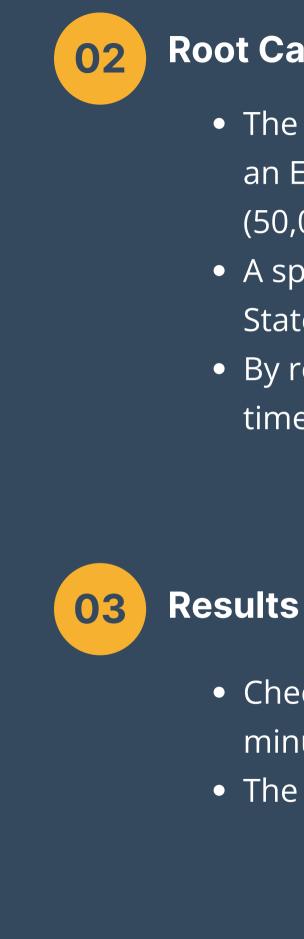
Key Issues Identified

- Checkout times were excessively long, reaching up to two minutes.
- Standard timeline profiling failed to pinpoint clear performance bottlenecks.
- Tideways' Callgraph Tracepoints discovered that a custom plugin was responsible for 66% of the request time.

Looking at the callgraph tracepoints helped us to identify the bottleneck in the plugin within a few minutes.



Benjamin Eberlei, Founder Tideways GmbH



Root Cause & Solution

• The plugin, which connected Shopware with an ERP system, loaded excessive data (50,000 database objects).

• A specific eager loading operation in the State Machine History was the main culprit. • By removing this inefficient code, checkout times were dramatically reduced.

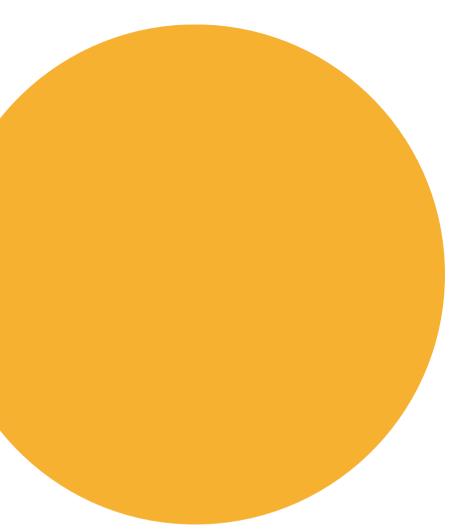
• Checkout duration dropped from up to 2 minutes to a maximum of 17 seconds. • The optimized plugin alone saved 29 seconds.



CONTACT



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