



CASE STUDY

Teads streamlines operations to drive engaging ad experiences for 2.2B global users

Redpanda is the “glue,” providing worry-free operations while using 87% fewer resources than Apache Kafka®

100B

EVENTS TRACKED
DAILY

87%

REDUCTION IN BROKERS

600TB

OF DATA MANAGED

“I recommend Redpanda to anybody running a significant event-based workload. It’s Kafka-compliant, comes with batteries included, and brings beautiful operational simplicity.”



Jason Posthuma,
Director of Core Infrastructure, Teads



Teads is a global, AI-powered platform that helps brands captivate their audiences with engaging ad experiences in meaningful, measurable ways.

HIGHLIGHTS

CHALLENGES

- Managing complex and costly architecture
- Time-consuming manual data transfer
- Lack of scalability

WHY REDPANDA

- Lower hardware costs and TCO
- Simplified operations
- Fully Kafka compliant

RESULTS

- 87% fewer brokers for the same workload
- Scalable event tracking without increased costs or maintenance
- Seamless upgrades to keep up with industry security standards

INDUSTRY

Advertising services

COMPANY SIZE

1,000–5,000 employees

CHALLENGE

Managing 100 billion daily events using complex infrastructure

For digital marketers, events are everything. So when 20,000+ advertisers and 10,000+ publishers place ads with Teads, an omnichannel advertising platform, comprehensive event tracking and performance data are the keys to optimized campaigns and measurable results.

“Events are core to how Teads works. When we show an ad, whether it’s a still image or a video, we send an event to prove it’s been viewed. That becomes a billable event for us,” says Jason Posthuma, Director of Core Infrastructure at Teads.

Before deploying Redpanda, Jason and his team were managing open-source Kafka themselves. They had Apache ZooKeeper™, Kafka, and Cruise Control running on 500 Kafka brokers, and were tracking billions of daily streaming events — all on an extensive support infrastructure they had stitched together.

We were ingesting gigabytes of data per second from around the world. Maintaining all the different systems that had to interoperate created enormous complexity.”

Aside from increased risk of expensive outages, the complexity also prevented the team from upgrading their Kafka instance to meet industry standards and provide modern features to their Kafka-as-a-Service internal clients.

Plus, the core platform engineers spent hours on simple, daily operations, and the inefficiency was particularly apparent during the Q4 holiday season rush. This involved a massive multi-sprint project to upgrade and scale out Kafka fleets, then rapidly scale them down in January when ad revenue dropped.

“We were burning cash while managing operations that shouldn’t be necessary,” Jason says. Subsequently, Jason and his team wanted to streamline operations while reducing the total cost of ownership (TCO) and saving crucial engineering hours.

Seamless migration, simpler operations, and robust security

After considering options including Confluent, Pulsar, and Strimzi, Jason and his team chose Redpanda Self-Managed on AWS, which promised massive improvements in performance, simplicity, and TCO.

“Migrating our entire Kafka fleet to Redpanda would allow us to track events in a worry-free, high-velocity, low-maintenance way,” Jason explains.

Redpanda also provided several influential advantages, including:

- **Kafka compliance** ensures a seamless integration with Teads’ existing infrastructure, making Redpanda a plug-and-play solution.
- **Simplified operations** as Redpanda skips the need for supporting infrastructure like ZooKeeper and Cruise Control.
- **Data safety and reliability** due to Redpanda’s use of the Raft consensus algorithm, which enables Teads to adopt a replication factor of three (an industry standard and best practice) compared to just two on their Kafka setup.
- **Tiered storage** means low-cost, long-term data retention, which gives the team confidence to roll out new features, knowing they can always reprocess the data in case of a bug.

“Redpanda allows us to keep days and days worth of data in Amazon S3, at little additional cost. This gives us a huge freedom as an organization, not just as an infrastructure team.”

Last but not least, the level of support and dedication from Redpanda’s team was — according to Jason — “phenomenal,” with monthly check-ins that helped new teams ramp up on Redpanda quickly and confidently.



Redpanda comes with batteries included, which means we don’t have to bring our own solution for managing metadata or scaling. Redpanda handles everything — with less hardware.

Jason Posthuma, Director of Core Infrastructure, Teads

RESULTS

Staying competitive while using fewer resources

Today, Redpanda is “the glue” that holds Teads’ tech stacks together, sparing its engineers from the complexity of legacy systems. Redpanda now handles system management automatically, freeing up countless engineering hours for strategic work rather than operational maintenance.

As a result, Teads can now smoothly roll out system updates to keep up with industry standards and provide internal clients with more autonomy and reliability than before.

“Redpanda allows us to stay up to date from a security and capability standpoint. We did our first upgrade in years on our Redpanda deployment — that was more than we’ve ever done on our Kafka stack. It’s a huge win.”

With Redpanda facilitating reliable event tracking, Teads has completely revamped its Kafka environment, dropping its **Kafka broker count from 500 to just 63** while maintaining the same workload, significantly reducing AWS hardware costs.

Looking ahead, Jason says he’s most excited about Redpanda’s ability to stream data directly to S3 in Iceberg format. This will save the analytics team from having to pipe data around and let them focus on their core duty: synthesizing a data model that works across the Teads ecosystem.

After his experience implementing Redpanda, Jason believes that any team or organization with substantial event-based workloads can benefit from adopting it. From operational simplicity and dedicated support to giving the team complete peace of mind, Redpanda has proven itself to be a reliable partner as Teads continues to redefine what’s possible in omnichannel marketing.



I have worry-free automatic operations. I have a long history of events stored in S3 cheaply and with less hardware. It’s a beautiful amount of operational simplicity.”

Jason Posthuma, Director of Core Infrastructure, Teads

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