**Better**

CASE STUDY

# Better Mortgage Speeds Kubernetes Troubleshooting with Help from Mezmo

"As our engineering team has grown, a top priority is making sure that all of our engineers know how to use the tools that we give them. And, as the Core Tech team, we can put sensible defaults in place to get them off on the right foot with Mezmo." – Ethan Langevin, Senior Engineering Manager at Better

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# Quick Summary

## INDUSTRY

Financial Services

## REQUIREMENTS

- Easy to deploy across multiple teams
- Centralized logging
- Kubernetes support
- Reliable indexing
- Easy search
- Data visualizations
- Long log retention
- Ability to cross-reference logs with other data points
- Features for debugging and analytics

## MEZMO SOLUTIONS

- Deployed across all engineering teams at Better
- Mezmo Kubernetes Agent and Kubernetes Enrichment
- Google-like search syntax
- Boards, Graphs, and Screens
- 30-day log retention and easy archiving
- Easy to use alongside Datadog and other data management tools

## BUSINESS IMPACT

- All teams own their logging and monitoring and are empowered to own their applications end-to-end
- Reduces MTTD and MTTR
- Enables continuous delivery, which gives them a large competitive advantage against banks that have old development processes and methodologies

Better Mortgage promises its customers a seamless experience for securing a mortgage. To deliver fully on that promise, the company must ensure that it can quickly identify, troubleshoot, and resolve software performance and security issues that arise within its IT environments.

With the help of Mezmo, Better Mortgage was able to build a software monitoring and analytics stack that delivers the visibility its engineers need to find and fix problems fast. Read on for a look at why Better Mortgage migrated from an open source analytics solution to Mezmo, and how Mezmo helped the company optimize the management of its complex, Kubernetes-based environments.

# The need for simpler, faster analytics

Better Mortgage's Core Tech team, which manages infrastructure tools, developer tools, core services, authorization, and all libraries, places a priority on minimizing MTTD and MTTR in order to align engineering goals with business goals. To do that, the team's engineers need a fast and reliable way to analyze log data associated with issues detected by its monitoring software.

The team initially relied on Kibana, an open source analytics tool, to help make sense of the data generated by its applications and infrastructure. But the tool proved difficult to use, especially for developers not already familiar with its complex search syntax. It also required a lot of time to maintain, because the team had to manage the platform itself.

In searching for a new analytics solution, Better Mortgage's engineers identified a core set of features that they needed in order to resolve problems faster.

They included the ability to search through logs easily, cross-reference logs with other data points (such as alerts from Datadog, which the team uses for monitoring, but found too complex for log management), and build meaningful visualizations from log data.

Affordable long-term retention of log data was a priority as well, given the data retention rules that Better Mortgage faces within the tightly regulated financial services industry. The fact that Mezmo can archive logs to Amazon S3, the low-cost cloud storage service, allows Better Mortgage to retain log data for extended periods at an affordable price, which helps meet compliance requirements.

Perhaps most important of all, the team sought an analytics tool that would be easy for all of its engineers to use, regardless of their backgrounds or skill sets. "As our engineering team has grown, a top priority is making sure that all of our engineers know how to use the tools that we give them," said Ethan Langevin, Senior Engineering Manager at Better Mortgage.

## Mezmo enables easier log analysis for all engineers

The team found the features it required in Mezmo, which now supports all of the log analytics needs of Better Mortgage. The tool's simple search syntax and rich visualizations make it easy for all team members to use the platform. Currently, over one hundred engineers at Better Mortgage use Mezmo every week.

With Mezmo, when the team receives an alert about a potential issue with its systems, any engineer on call can quickly open Mezmo, select the impacted service, and track the history of the service to determine how long the problem has been happening and when it originated. Engineers can also determine whether similar issues have occurred in the past and detect patterns that help pinpoint their source, such as a problem that arises at the same time each day or week.
In addition, Mezmo has simplified security and compliance needs for Better Mortgage's engineering team. "Sometimes a user will ask us to look into a security concern," Langevin said, "we use Mezmo to find the logs related to their request so that we can tell them exactly what happened and determine whether the concern is merited."

## Full-fledged support for Kubernetes log analysis

The team also benefits from Mezmo's robust support for Kubernetes. Not only can Mezmo easily ingest and analyze Kubernetes log sources, but the tool's Kubernetes Enrichment feature enables Mezmo to interpret the unique variables within Kubernetes environments. This helps engineers correlate events and understand behavior patterns in a Kubernetes cluster that would otherwise be obvious only through tedious manual analysis of Kubernetes events.

Better Mortgage was one of the first Mezmo customers to use the Kubernetes Enrichment feature when Mezmo introduced it in 2020. The feature has helped Better Mortgage take full advantage of Kubernetes to power its production software without suffering the visibility gaps that often arise when managing complex Kubernetes environments.

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> *- Ethan Langevin, Senior Engineering Manager at Better*

# Conclusion

By leveraging Mezmo to streamline log analytics, Better Mortgage's Core Tech team has not only simplified troubleshooting for Kubernetes environments, but has also laid the foundation for a complete Continuous Delivery (CD) pipeline. "Logging is really important to being able to practice CD," Langevin explained, "because it ensures that the team can detect errors, perform discovery, and troubleshoot problems quickly in the event that an issue arises." Mezmo enables Better to fix problems rapidly, without disrupting the continuous flow of their CD pipeline.

With a healthy CD process that is undergirded by Mezmo, Better Mortgage enjoys the ability to release software updates rapidly and, by extension, optimize the customer experience. "CD gives us a big competitive advantage compared to banks that have old development processes and methodologies," Langevin said, adding that the fast release cycles that his team achieves are particularly important during events like the Covid-19 pandemic, which made fast and continuous updates to software systems critical.

# About Mezmo

At Mezmo, everything starts with our mission: To help developers be more productive so they can focus on what they love. We are a mission-driven, developer-first company. This mission is simple, but bold. We focus on logging because logs are the lifeblood for developers — it is the core atomic unit for how modern engineering teams understand what's going on with their systems, monitor what they are doing, and get information they need to troubleshoot. Simply put, everything rests on your logs.

Sign up for a fully-featured 14-day trial and optimize your logging workflow or reach out to our sales team to create a plan tailored to your needs at outreach@mezmo.com today.

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# Thank You