

With little cost difference, Bossa obtained distributed tracing with metrics and a much more accurate overall picture



Bossa no longer have to worry about administration and backups; all of their systems are highly available



The mere simplicity of being able to integrate data effortlessly is a great benefit for Bossa



The VMware Tanzu Observability correlation function is stimulating and enables correlations across the full Bossa domain

# **Bossa Studios**

VMware Tanzu Observability™ helps Bossa Studios improve its gamers' experience

# About Bossa Studios

Bossa Studios is an independent gaming company. Their latest move from single-player gaming to online multiplayer gaming brought them to the cloud, and then from there, they needed Tanzu Observability.

Bossa Studios Ltd. is a games developer and publisher founded in 2010 in London, United Kingdom. Their titles are *Monstermind* (BAFTA prize winner), *Surgeon Simulator* (BAFTA prize nomination), *I am Bread* and *Worlds Adrift*, the latest. The company has brought much novelty into the world of games, gathering millions of gamers worldwide. Bossa strives to create games beyond genres and reach out to new audiences—quite a challenge, technologically.

# The challenge

The Bossa DevOps team includes developers that make games and SREs who are responsible for maintaining them, but they all work as a unit. They are responsible for ensuring that complex back-end services enable the functioning of the game. That includes dealing with an inventory of the system, logins, connections, voice communications and so on. They keep all of those up and running, and monitor the availability of their games. Developers adopted microservices approach to their software with many different moving parts.

Bossa has a hybrid system environment: partially running on premises, partly in the public cloud (AWS). When it comes to serverless and containers, they use AWS Fargate and Kubernetes.



INDUSTRY Technology

#### HEADQUARTERS

London, United Kingdom

#### LEARN MORE

Learn more about VMware Tanzu Observability at *tanzu.vmware.com/observability*.

### FOR MORE INFORMATION OR TO PURCHASE VMWARE PRODUCTS

Call 877-4-VMWARE (outside North America, +1-650-427-5000) or visit vmware.com/products.



When it comes to microservices, Bossa developers use mostly Java, but also C# and Scala. They are running CI/CD pipelines pushing nonproduction code hourly with daily production code pushes.

To monitor their hybrid environment, Bossa DevOps teams used other commercial monitoring tools but were dissatisfied. The primary problems were with false positives and support of the vendor, but there were also cost issues and a lack of visibility into pricing. They were very unhappy with opaque billing/pricing for their dynamic container environment.

## The solution

Bossa engineers want to spend more time fixing things instead of just trying to figure out what went wrong. That is why they decided to adopt Tanzu Observability. From the start, the flexibility and support were what made Tanzu Observability integration with their systems effortless.

Although a lot better fit for many things, they still need to migrate fully to Tanzu Observability. Keeping track of the data with running job apps is practical, especially as Tanzu Observability is fully compatible with OpenTracing. Bossa developers appreciate that Tanzu Observability offers lots of SDKs with pieces available to tie in quickly all their moving parts. That helps their small team to be more efficient and focus on solving problems. Tanzu Observability is helpful even for developers with no previous knowledge—they can quickly get into Tanzu Observability and work.

Although still in their early days, Bossa's engineers speak of nothing but the calm, the ease of use and easy implementation of Tanzu Observability. Also, they praise the support the Tanzu Observability team has provided.

It has been a positive experience for Bossa. With minimum effort, they create dashboards.

Tanzu Observability Distributed Tracing is allowing for quicker, well-informed iterations when troubleshooting, for understanding where bottlenecks or problem areas lie. Before Tanzu Observability, Bossa had used application logs, which was rather complicated. They are now tagging metrics and traces. When they pull those out afterward, they will also show their correlations, and what went wrong precisely. Tanzu Observability could work alongside, or above/in between their current monitoring solutions, which allowed a much more relaxed deployment, as nothing remained unmonitored as they deployed Tanzu Observability.

There are no more false positives and no more unnecessary alerts at 2:30 AM. Tanzu Observability offers a much more flexible dashboarding. Alerts playback allows developers to tweak things a lot better, much more quickly, instead of reacting after the fact. With historical data, they can see how the errors come through. The newly acquired ability to rerun the data allows them to try different scenarios—a significant advantage. They can discern the sequence of events that caused an issue. They can try out the effects of accumulation or if an incident X or Y happens after an amount of time. They can "proactively tune" alerts instead of reactively. "So, if you do actually get woken up at 2:30 AM, it's because there's actually a pretty big problem."

## With Tanzu Observability

The impact of Tanzu Observability that the Bossa team is looking forward to, besides reduced troubleshooting times, is undoubtedly the cost. With little cost difference, they obtained distributed tracing with metrics and a much more accurate overall picture. The traces for insight in issues are displayed; internal visibility shows events inside the actual code. One could trace previously through direct control over the server, logging a lot of it. Then they'd go down, dig through all the logs, find where the traces gave the exact timing per transaction. Tanzu Observability made it a lot easier. They can easily find code bottlenecks.

"So, it allowed for more rapid iteration, more rapid improvements in our code, basically," Nick Warr, head of IT, Bossa.

"[Tanzu Observability] is a one-stop shop for Bossa: You click it, do what it says and all of a sudden, there is a working dashboard."

NICK WARR HEAD OF IT, BOSSA STUDIOS

The premiere use case for tracing is visibility into third-party services and APIs that they do not control. They used Amazon ELB and managed database services in the background through the RDS. The administrative overhead was a bit much to manage all on their own. Now they don't have to worry about administration and backups; all their systems are highly available.

Tanzu Observability dashboards overlay metrics and traces. Thus combined, everything gets pulled into one view. Once you get a page, you can immediately identify long expanse, and so on. Bossa is still finishing up the deployment of the "new pieces" before sending them to Tanzu Observability proxy along with metrics extrapolated from logs. They plan to stack up both at the same time. Afterward, and after obtaining everything from data logs, they will redeploy with just Tanzu Observability. The mere simplicity of being able to integrate things effortlessly is a great benefit.



The Tanzu Observability correlation function is stimulating, and the Bossa team sees significant value in it. It enables correlations across the full domain. There are some functions Bossa has deployed and integrated directly into the code for tracing purposes. Apart from that, functionalities they find useful include Linux integrations, the Kubernetes dashboards as well as AWS integrations.

For Bossa, Tanzu Observability provides the first pane of glass and is a one-stop shop for Bossa: "You click it, do what it says and all of a sudden, there is a working dashboard. Since starting with [Tanzu Observability], Bossa has been able to do a lot more, with a lot more information at the fingertips." Moreover, Tanzu Observability for Bossa is a "big winner," and at the same time "easy to use."

They felt happy with outstanding technical support providing all the information they needed. "No ifs, buts, or maybes." That is also what made it a significant benefit. When you ask yourself: "Am I doing this the right way? Is this the right way to go about it?"—And it is.

For Bossa, the overall experience with Tanzu Observability has been a positive one.



VMware, Inc. 3401 Hillview Avenue Palo Alto CA 94304 USA Tel 877-486-9273 Fax 650-427-5001 vmware.com Copyright © 2020 VMware, Inc. All rights reserved. This product is protected by U.S. and international copyright and intellectual property laws. VMware products are covered by one or more patents listed at vmware.com/go/patents. VMware is a registered trademark of VMware, Inc. and its subsidiaries in the United States and other jurisdictions. All other marks and names mentioned herein may be trademarks of their respective companies. Item No: Bossa Studios Customer Success Story 11/20