

When billions of mission-critical file transfers depend on you

How ExaVault maximizes uptime using Instana

Instana, an IBM company

4-minute read

“We’re mission-critical for a lot of companies,” explains David Ordal, Chief Executive Officer (CEO) at ExaVault Inc., whose solutions facilitate two billion file transfers per year for customers such as Disney, Adobe, Xerox and Zillow.

The majority of ExaVault customers are performing automated, system-to-system file transfers, like moving data from a point-of-sale system to an analytics platform or an inventory management system. ExaVault’s API handles an average of 35,000 requests per minute and over 50 million calls daily. While the file transfers are automated, parties on both sides of the transfer rely on these automations to make business decisions.

“If we go down, our customers start losing money,” Ordal says.

The stakes high for individual ExaVault customers, and they each use ExaVault in a slightly different way, often creating custom functionality through the developer API. ExaVault’s entire customer base isn’t affected by all issues—in fact, often only a single customer experiences a slowdown. But if that happens, ExaVault’s team needs to be able to see what the customer is experiencing and debug the problem.

Before moving to the [IBM® Observability by Instana®](#) solution, ExaVault was using a monitoring system that made getting granular, customer-specific information nearly impossible. “We couldn’t tag transactions with their user ID, and then filter down into the specific customer issue,” explains Tom Fite, Senior Backend Engineer at ExaVault. Specific customer issues can be completely lost in averages—if a single customer is experiencing a slowdown, it won’t show up at all on a monitoring system that only gives a holistic view.

ExaVault achieved a

56.6%

MTR reduction

And it reached

99.999%

availability

Fast, user-friendly visibility

When ExaVault started looking for a new monitoring solution, the top priority was the ability to break down metrics by account and see what “edge case” customers were experiencing. Other top criteria were cost and user interface, both of which had been pain points with previous vendors.

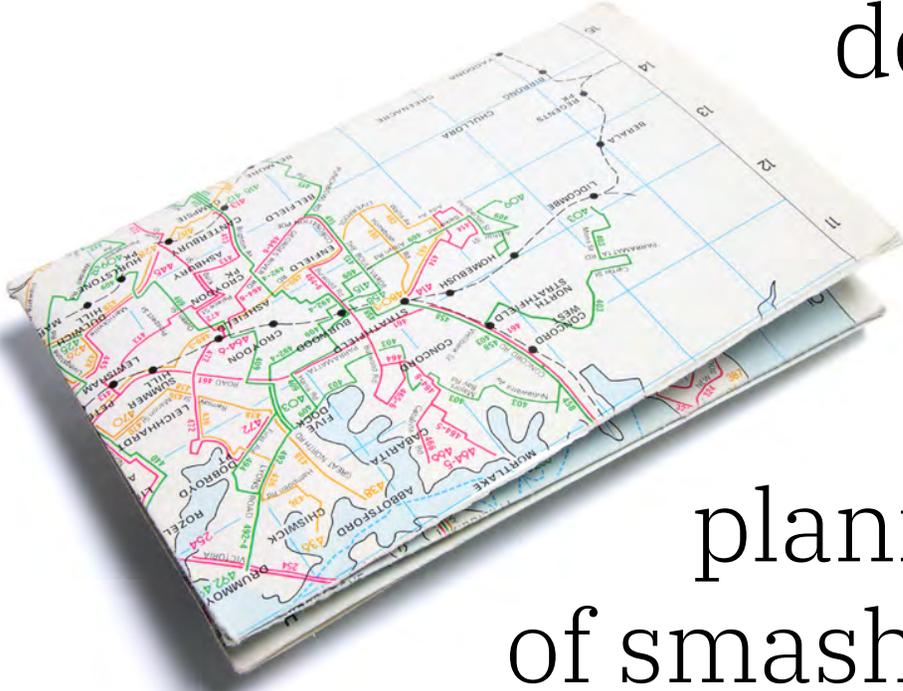
“Some APM vendors are prohibitively expensive,” explains Fite. “Especially when you are talking about scaling your application and you have your monitoring running on more than a few boxes.”

ExaVault considered factors like stack traces, database calls, throughput, data retention policies and infrastructure monitoring. But a graphical user interface that makes sense to non-technical users was also a key reason to choose Instana.

“I’m a sucker for a good user interface,” Fite says. “But it can also help me explain



to other people on our team, especially people who are less technically savvy than me, that we have fixed an issue.”



“Our team is able to dedicate more time towards new features and roadmap planning, instead of smashing bugs all day.”

Eddie Castillo, Head of Marketing, ExaVault Inc.

Quicker resolutions & greater uptime

ExaVault uses Instana to monitor API performance and for error tracking, debugging and alerting. The most important metric ExaVault looks at on a day-to-day basis is latency. “We need to make sure every customer is having a good experience,” Fite says. “If a customer is waiting more than a couple seconds, they might leave.”

With Instana, though, Fite doesn’t have to look at the dashboard all day. Instead, Instana sends an alert to a dedicated Slack channel if anything is out of the ordinary.

When it comes to account-level monitoring, ExaVault uses the Instana software development kit (SDK) to assign metadata to each API call as it comes in. As a result, Fite can filter on a huge number of variables. The most common use case, though, is filtering by account or even by individual users in an account. “If a user is having a problem that we don’t see





at the high level, we can drill down and really troubleshoot just looking at their information,” Fite says.

Since ExaVault started using Instana, the mean time to resolution (MTTR) for customer-impacting bugs has dropped by 56.6%. In addition, the platform’s slowdowns and downtime have decreased substantially. It was at 99.51% uptime before, and it’s now at 99.99% . “We’re accomplishing the goal that we set out to do,” Fite explains. “The reason we were able to do that is we had better visibility into our problems.”

In some cases, there were bugs ExaVault didn’t even know existed before using Instana. Within days of getting set up with Instana, ExaVault realized there was a bug in the software that was querying the memory cache too frequently and wasn’t saving correctly. Fixing the previously invisible bug immediately reduced the load on application servers.

Gaining time for innovation

“Our tech debt has decreased because we’re able to get through stuff a lot faster,” says Eddie Castillo, ExaVault’s Head of Marketing. “Our team is able to dedicate more time towards new features and roadmap planning, instead of smashing bugs all day.”

There are a few major projects on the horizon. Without the robust internal testing possible with Instana, Fite would be a lot more worried about the potential for bugs to slip as they deploy improvements to the API. “Instana is going to help us ensure that the changes work better than the current version,” Fite says.

ExaVault is also working on moving from a homegrown container orchestration system to Kubernetes. Lastly, ExaVault is excited to start using Instana’s deployment tracking to compare performance metrics before and after deployments in the future.



“With the upcoming roadmap, if we didn’t have these tools, it would be impossible to keep an eye on our tech stack,” Castillo says. “Tom used to have a million terminal

windows open on his desktop. But having these tools in place, it gives us visibility as we diversify and add more complexity to our overall architecture.”



About ExaVault Inc.

[ExaVault](#) (external link) provides FTP and file sharing solutions for businesses of all sizes in more than 100 countries. Its solution enhances traditional FTP/SFTP with a modern interface and enables secure collaboration and sharing across platforms and time zones. ExaVault was founded in 2009 and is headquartered in San Ramon, California.

Solution component

- IBM® Observability by Instana®



About Instana, an IBM Company

[Instana](#) (external link), an IBM Company, provides an [Enterprise Observability Platform](#) (external link) with [automated application performance monitoring](#) (external link) capabilities to businesses operating complex, modern, cloud-native applications no matter where they reside—on premises or in public and private clouds, including mobile devices or IBM Z® mainframe computers.

Control modern hybrid applications with Instana’s AI-powered discovery of deep contextual dependencies inside hybrid applications. Instana also provides visibility into development pipelines to help enable closed-loop DevOps automation.

These capabilities provide actionable feedback needed for clients as they optimize application performance, enable innovation and mitigate risk, helping DevOps increase efficiency and add value to software delivery pipelines while meeting their service and business level objectives.

For more information, visit instana.com (external link).