Ensuring Cloud Reliability with Infrastructure Monitoring

Migrating Highly Regulated Workloads with No Room for Error

For CMD’s risk-averse clients to embrace the efficiency and scalability of cloud infrastructure, CMD must first prove that their critical workloads will be safe, reliable, and performant in the cloud. To foster this faith, CMD migrates customers’ workloads in phases, proving the performance and reliability of each application component in a staging environment before deploying to production. CMD must therefore have deep visibility into cloud workloads and their underlying infrastructure throughout the migration process.

A technical mishap could undermine these companies’ sterling reputations and potentially subvert their plans for the cloud altogether. Accordingly, CMD has stringent SLAs—with explicit cost implications if not met—that require near-constant uptime and have short windows for incident response. To meet these SLAs, CMD must maintain a high-level view of all of their customers’ environments at once. But with all customers requiring high-touch service simultaneously, CMD needed tools and processes that would allow them to migrate and support customer workloads without engaging in time-consuming, manual work that could take attention away from critical system issues.

“We have a number of MSP clients, so we need to have a single-pane-of-glass view across performance and outages.”

Adam Durbin, Director of Strategy and Architecture, CMD Solutions

Key Results

Increased Trust
Datadog’s read-only dashboards allow CMD to showcase their MTTR and build customer confidence.

Scalable Solutions
Datadog dovetails with CMD’s other automation efforts by allowing them to deploy dashboards and alerting rules programmatically with the Datadog API.

Reduced Alert Fatigue
Datadog’s machine learning-based monitors ensure CMD’s engineers are only alerted to critical issues.

About CMD Solutions

CMD Solutions is a DevSecOps consultancy that helps Australia’s highly regulated companies—such as health insurers, payment gateways, and financial institutions—move compliant workloads to the cloud. By providing a roadmap for digital transformation and the option to partner as a long-term managed service provider, CMD enables these security-conscious companies to unlock the flexibility and financial benefits of AWS.

A Trusted Partner to Migrate Secure Workloads

CMD selected Datadog to help migrate customers’ workloads with confidence and effectively support them in the cloud. Datadog’s out-of-the-box integrations with AWS provide CMD with an immediate understanding of their customers’ cloud environments, allowing CMD to ensure the reliability of cloud workloads and meet SLAs throughout the transformation. With real-time metrics and insights into customers’ migrated systems, CMD can verify application performance and efficiency in pre-production to ensure that applications are ready for release.
Challenge

CMD Solutions required visibility into cloud workloads and infrastructure so they could facilitate safe and reliable cloud migrations for their customers. They also needed to be able to discern between critical signals and false alarms in order to mitigate any performance or availability issues that might occur in their customers’ dynamic environments.

Why Datadog?

Datadog’s support for AWS enabled CMD to immediately understand their customers’ cloud environments so they could ensure the reliability of workloads throughout the migration process. Additionally, Datadog monitors, which use machine learning to evaluate historical trends, helped reduce alert fatigue so CMD engineers could focus on maintaining uptime, meeting SLAs, and preventing mishaps that could discourage further cloud adoption in their customer base.

Datadog Ensures Transformational Benefits of the Cloud

From the moment their customers’ assets enter pre-production on the cloud, CMD deploys Datadog to begin benchmarking and optimizing the consumption of cloud resources, as CMD must demonstrate performance and efficiency gains throughout the process. Datadog’s deep integrations with AWS allow CMD to track high-resolution metrics from every server and cloud service during load tests to inform platform and configuration adjustments. “We implement Datadog to environments to get a view of performance early, to see what changes to the application are doing over time,” says CMD’s Director of Strategy and Architecture, Adam Durbin. By visually comparing historical and real-time CPU, memory, and availability data from across their environments in a Datadog dashboard, CMD customers are able to quantify their performance gains over time and validate their continued cloud investment.

On the cloud, Datadog seamlessly integrates with CMD’s automation practices to reduce the manual overhead of infrastructure management and to ensure the resilience and scalability of customers’ new, dynamic environments. With the ability to monitor all customer’s servers and AWS services in Datadog, CMD can automatically manage and scale clients’ infrastructure, and their own customer base, with ease.

“We always recommend transformations: re-architecting, re-designing, uplifting applications and services to be more cloud-native and utilize the availability, redundancy, and scalability of the cloud.”

Adam Durbin, Director of Strategy and Architecture, CMD Solutions

Meeting SLAs and Increasing Cloud Adoption with Infrastructure Monitoring

Early phases of a migration project must go well in order to instill confidence and ensure that the new cloud environment is suitable for customers’ most critical workloads. Datadog’s ability to discern signals from noise helps CMD support their customers’ dynamic environments and mitigate any performance or availability issues that might cause customer concern. Datadog alerts evaluate historical trends using machine learning to only alert CMD when a client’s system is actually in trouble. This reduces alert fatigue and directs CMD engineers’ attention exactly where it’s needed to maintain customer uptime, meet SLAs, and prevent mishaps that could discourage further cloud adoption.

The Datadog dashboards that CMD sets up to track critical health metrics for every account not only help CMD identify and address performance, availability, and capacity issues, they also provide transparency around the MSP’s effectiveness and ability to meet SLAs. Datadog’s “read-only” option lets CMD share these dashboards with customers to display their quick mean time to
“Visibility into application performance is very important around customer response times. We can quickly identify if there’s an issue, or slow performance, what the root cause is, and remediate it.”

Adam Durbin, Director of Strategy and Architecture, CMD Solutions

Cloud Adoption Leads to Security Gains

When migrating client workloads to the cloud, CMD must ensure that customers’ systems and private data are secure. That means selecting trusted technology partners and embracing the security gains of a modern cloud platform. Datadog’s SOC 2 Type 2 Certification and proactive stance on security led CMD to definitively endorse Datadog to monitor their high-profile customers’ cloud migrations. CMD has found that organizations often improve their overall security posture by moving to AWS, without having to bear the complete cost and complexity themselves. “We have customers who were unable to meet their security compliance for their workloads on-premise. But by migrating to the cloud, they have achieved what they never could have or what was cost-prohibitive on-premise,” explains Durbin.

“We have a very strong focus on embedding security and resilience.”

Adam Durbin, Director of Strategy and Architecture, CMD Solutions

Infrastructure-as-Code and Cloud-Native Monitoring Offer a Scalable Approach

To enable CMD to support their customers’ AWS infrastructure on an ongoing basis, Datadog dovetails with CMD’s larger automation efforts and provides a central overview of all customers’ environments. Onboarding new accounts and collectively managing customers’ infrastructure is streamlined with Datadog’s multi-tenancy, which allows CMD to create “child” accounts for each customer under a single “parent” account. CMD can then automatically deploy dashboards and alerting rules programmatically through the Datadog API to all child accounts. This allows CMD’s nimble team of experts to scale monitoring best practices across accounts as their business matures and their customers’ environments expand.

With Datadog, CMD helps customers “go all in” on the cloud, says Durbin, working toward “shutting down data centers, not just solving a single workload.”