

# Cloud migrations with Datadog



## Challenges

### Migrate to the cloud without delays or incidents

Cloud migrations can sometimes become difficult and time-consuming for a company's engineering department. From selecting cloud-native tooling for a new cloud architecture, to navigating unforeseen configuration issues during a cutover, cloud migrations can become prone to frequent delays, team mis-communication, and performance problems. These situations can lead to business-impacting events such as product release delays, performance incidents impacting end users, and outages.



## The Datadog solution on AWS

### Monitoring for modern cloud environments

Datadog offers a variety of application monitoring capabilities that helps to quickly search, filter, and analyze your logs for troubleshooting and open-ended exploration of your data thus optimizing application, platform, or services performance. With more than 350 vendor-supported integrations, Datadog seamlessly aggregates metrics and events across the full DevOps stack. Datadog provides end-to-end visibility into on-premises and cloud environments on the same platform. The Datadog platform allows engineering teams to analyze application performance problems, whether they affect a single host or a massive cluster. The solution also allows you to communicate SLA adherence and KPIs among engineering teams, executives, and external stakeholders.

## Benefits

Reduce risk during modernization of infrastructure and applications



#### Overall visibility of apps during migration

With Datadog's data visualization and analytics capabilities, the performance of an application, as well as its infrastructure and supporting tools, can be simultaneously observed on the same pane of glass.



#### Reduce time in log data analysis

With over 350 vendor-supported integrations, Datadog can be configured within minutes to ingest performance metrics, logs, and discrete events from all infrastructure in the legacy environment, as well as the new cloud platform.



#### Reduce time in monitoring dynamic, service-based application infrastructure

Datadog is a "born in the cloud" monitoring platform. All alerts and dashboards report on the service level, and will automatically reflect the changes in hosts or containers that have been introduced or removed from a service.



#### Compare cloud performance to previous on-premises benchmarks

Datadog retains 15 months of performance data at full granularity, allowing for comparisons of past states of an application and its supporting infrastructure.

## Datadog on AWS

Organizations are migrating to AWS because it enables them to scale their infrastructure on-demand from their end-users. Datadog's monitoring solution scales with infrastructure demand to ensure visibility into the health of servers and applications. Used in parallel, the organization's end-users will have scalable infrastructure from AWS, and a pulse on the health of the infrastructure and applications running on the servers with Datadog. Together, AWS and Datadog enable an organization to be confident in infrastructure health, and application uptime which result in end-user satisfaction. DataDog is an **Advanced Technology Partner and has achieved a Migration, Microsoft Workload Migration, DevOps, and Containers competency.**

### Features



#### 350+ vendor-supported integrations

Datadog's 350+ OOTB integrations include 40+ AWS integrations which pull metrics from Amazon CloudWatch. This allows an organization to immediately pull metrics from AWS tools and services in Datadog. The integration also provides OOTB dashboards with common metrics visualized for AWS services (ex: Amazon Elastic Compute Cloud (Amazon EC2), Amazon Simple Storage Service (Amazon S3), Amazon Elastic MapReduce, Amazon DynamoDB etc.). As these metrics flow into Datadog, you're able to leverage Datadog's machine learning based alerting capabilities as well as create impactful dashboards in the platform.



#### Hybrid cloud support

Organizations can use Datadog's AWS integrations for quick value and visibility, or they can install the Datadog agent to get more granular metrics from their AWS environment. This agent can also be installed in on-premises infrastructure. While migrating to AWS, getting visibility into the same applications running on-premises and AWS with granularity enables cutover to AWS with confidence.

### Case Study: Capital One



#### Challenges

Capital One was seeing a spike in AWS Lambda invocations for one specific function, and it was difficult to tell why this was occurring. It was very important for them to diagnose since it could indicate a system failure and couple impact cost.



#### Solution

Datadog's metric correlations allowed them to highlight the spike / anomaly in the AWS Lambda invocations metric and scan their Datadog environment for any other metrics following the same trend.



#### Results

Capital One was able to link the AWS Lambda invocations metric in minutes with related metrics. This allowed them to see that they also had a spike in payment system AWS Lambda invocations, as well as Amazon Simple Queue Service posts in an AWS messaging queue, which immediately got them closer to understanding the root cause of the issue.

## Get started with DataDog on AWS

[Contact DataDog](#) for further information