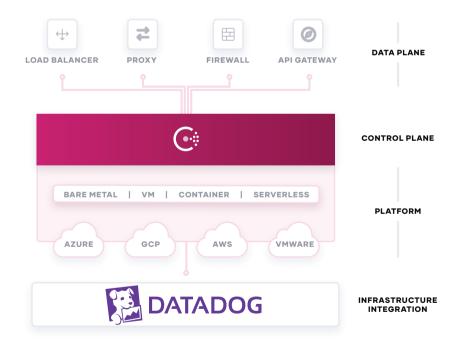
HashiCorp

# **Enhance Microservice Observability**

# Addressing the Monitoring Challenge

For DevOps teams and application developers, moving to microservices can be a difficult task. There are often many more discrete services to deploy and monitor in this model, and developers need observability into both the performance of the individual services as well as the network latency of them talking to one another. The increased number of services and complexity of the network, makes achieving this more difficult.



# HashiCorp Consul and Datadog

Organizations can utilize Consul to improve observability in their microservice environment. Datadog's APM is built for microservices, so teams can still see service performance when they move to a microservice model. Meanwhile, the Consul integration for Datadog provides observability into the health of the service mesh itself and the network latency between services so that developers are not left with any blindspots.

## How It Works

The Consul integration is built directly into the Datadog Agent. Users configure Consul to output its telemetry data to Dogstatsd, a metrics aggregation service, which Datadog then ingests for use in dashboards. Information can be tagged and Datadog can collect logs to monitor internal operations like leader election, health checks and membership changes. This integration also supports creating custom alerting and enabling tracing on services which can also help to reduce outages.



Figure 2: Consul Metrics on a Datadog Dashboard

## Use Cases

## **Enhanced Observability**

Custom dashboards make it easier for organizations to consolidate information about the health of their network. Users can capture information about leader elections, membership changes, and health checks.

## **Custom Alerting**

Avoid having to manually check the health of Consul clusters through custom alerting. Datadog users can configure alerts to include custom messages to make it easier for notified users to know exactly what to inspect.

## **Distributed Tracing**

Get more granular details into a service request as it moves throughout the service mesh and interacts with other services. Tracing captures information at each stage of the request and logs its for use in dashboards.

## **Company Info**

Datadog is a SaaS-based monitoring and analytics platform for large-scale applications and infrastructure. Combining real-time metrics from servers, containers, databases, and applications with end-to-end tracing and log management, Datadog delivers actionable alerts and powerful visualizations to provide full-stack observability. Datadog includes over 350 vendor-supported integrations and APM libraries for several languages.

