

DATADOG TRAINING SYLLABUS

Section 1: Datadog Fundamentals

- Understanding Datadog Interface
- Introduction to Key Datadog Concepts: Metrics, Traces, Logs, Watchdog

Section 2: Integrating AWS with Datadog

- Overview of AWS Monitoring
- Configuring Datadog AWS Integration
- Monitoring AWS Services (EC2, S3, RDS, Lambda, etc.) with Datadog
- Demonstrating AWS CloudWatch metrics and integrating them into Datadog

Section 3: Kubernetes Monitoring with EKS

- Introduction to EKS (Elastic Kubernetes Service)
- Setting up Datadog Integration with EKS
- Monitoring Kubernetes Clusters and Applications

Section 4 : Visualizing the metrics in customized dashboards

- Understanding the various Screen boards, Widgets, interfaces
- Understand how to leverage default Dashboard and customize it
- Understand how to use metrics explorer to identify the critical metrics for your application.
- Custom Metrics & Tags
- Best strategies for creating dashboards tailored to the needs of specific teams.

Section 5: Application Monitoring with Java, Python, and NodeJS application

- Distributed tracing the Java Applications with Postgress DB
- Distributed tracing the Python Application
- Distributed tracing the NodeJS Application with MongoDB
- Simulate various performance failures, identify the root cause using Profiling & Tracing
- Best Practices for Application Performance Monitoring

Section 6: Metrics and Watchdog

- In-depth Look at Metric types in Datadog
- Using Watchdog for Configuration, tuning, and anomaly identification
- Incorporating Machine Learning for Smarter Alerting

Section 7: Effective Alert management

- Creating Effective Alerts - Types, use cases
- Setting up Alert conditions, tuning thresholds, and advanced configurations.
- Integrating with Notification Channels- Email, MSTeams
- Best Practices for Reducing Alert Fatigue
- Effective incident response and iterative improvement

Section 8: SRE Principles

- Defining SLIs, SLOs, and error budgets.
- Creating SLO, Setup Alerts, and Data Correlation.
- Implementing error budgets in Datadog for SRE-driven reliability.
- Demonstrate the use of SLO notifications to proactively manage error budgets.

Section 9: Advanced Features

- AWS Cloud billing cost Monitoring Dashboard
- Logging Strategies – How to ingest only critical logs to Datadog.
- How to convert logs into meaningful business KPI's.
- Datadog Cost projection Monitoring
- Datadog API