Observability with Logs, Traces, and Metrics

Using Amazon OpenSearch Service, DevOps engineers gain insights to diagnose performance issues faster and reduce application downtime. To help visualize results and share data stories, the service includes Amazon OpenSearch Dashboards and Kibana. Understanding observability is a key component of application performance monitoring (APM) as well as infrastructure monitoring.

Applications, services, and containers produce three types of signals: logs, metrics, and traces.

Collectors such as Fluent Bit and Data Prepper transform and enrich these signals.

The collectors forward the data to different data stores. For example, Amazon OpenSearch Service stores traces and logs received from OpenSearch Data Prepper, and Amazon Managed Service for Prometheus stores metrics received from AWS Distro for OpenTelemetry metric scrapers.

Users create interactive dashboards and visualizations with this signal data using tools such as Amazon OpenSearch Service Dashboards and Amazon Managed Service for Grafana.

These visualization tools use data stored in Amazon OpenSearch Service and Amazon Managed Service for Prometheus to present information requested by users.