

AWS CloudWatch

Amazon CloudWatch is a monitoring and observability service provided by AWS. It allows you to collect and track metrics, collect and monitor log files, and set alarms. CloudWatch provides a unified view of your AWS resources and applications, helping you gain operational insights and ensure the availability, reliability, and performance of your applications.

Key Features:

1. **Metrics and Alarms:** CloudWatch collects and stores metric data, and you can set up alarms to receive notifications based on predefined thresholds.
2. **Logs and Insights:** You can collect, monitor, and analyse log data from your applications and AWS resources using CloudWatch Logs. CloudWatch Logs Insights allows you to search and analyse log data interactively.
3. **Dashboards:** You can create custom dashboards to visualize and monitor key metrics and resources in one place.
4. **Events and Automation:** CloudWatch Events enables you to respond to system events and automate actions in your AWS environment.
5. **Integration with AWS Services:** CloudWatch integrates with various AWS services, allowing you to monitor resources like EC2 instances, S3 buckets, Lambda functions, and more.

Use Cases:

Performance Monitoring: Tracking metrics to monitor the performance of AWS resources and applications.

Log Analysis: Collecting, searching, and analyzing log data for troubleshooting and analysis.

Automated Responses: Automating responses to events and triggering actions based on predefined rules.

Both AWS KMS and CloudWatch are crucial services for managing security and monitoring in your AWS environment, providing essential tools for protecting data and ensuring the operational health of your applications and resources.