**Amazon CloudWatch :- Management & Governance**

It is a monitoring and observability service built for DevOps engineers, developers, site reliability engineers (SREs), and IT managers. CloudWatch provides you with data and actionable insights to monitor your applications, respond to system-wide performance changes, optimize resource utilization, and get a unified view of operational health.

**Benefits:-**

* **Observability on a single platform across applications and infrastructure-** Amazon CloudWatch enables you to collect, access, and correlate this data on a single platform from across all your AWS resources, applications, and services that run on AWS and on-premises servers, helping you break down data silos so you can easily gain system-wide visibility and quickly resolve issues.
* **Easiest way to collect metrics in AWS and on-premises -** automatically publishes detailed 1-minute metrics and custom metrics with up to 1-second granularity so you can dive deep into your logs for additional context. You can also use CloudWatch in hybrid cloud architectures by using the CloudWatch Agent or API to monitor your on-premises resources**.**
* **Improve operational performance and resource optimization -** Amazon CloudWatch enables you to set alarms and automate actions based on either predefined thresholds, or on machine learning algorithms that identify anomalous behavior in your metrics**.**
* **Get operational visibility and insight -** CloudWatch provides automatic dashboards, data with 1-second granularity, and up to 15 months of metrics storage and retention. You can also perform metric math on your data to derive operational and utilization insights; for example, you can aggregate usage across an entire fleet of EC2 instances.
* **Derive actionable insights from logs -** With CloudWatch Logs Insights, you only pay for the queries you run. It scales with your log volume and query complexity giving you answers in seconds.