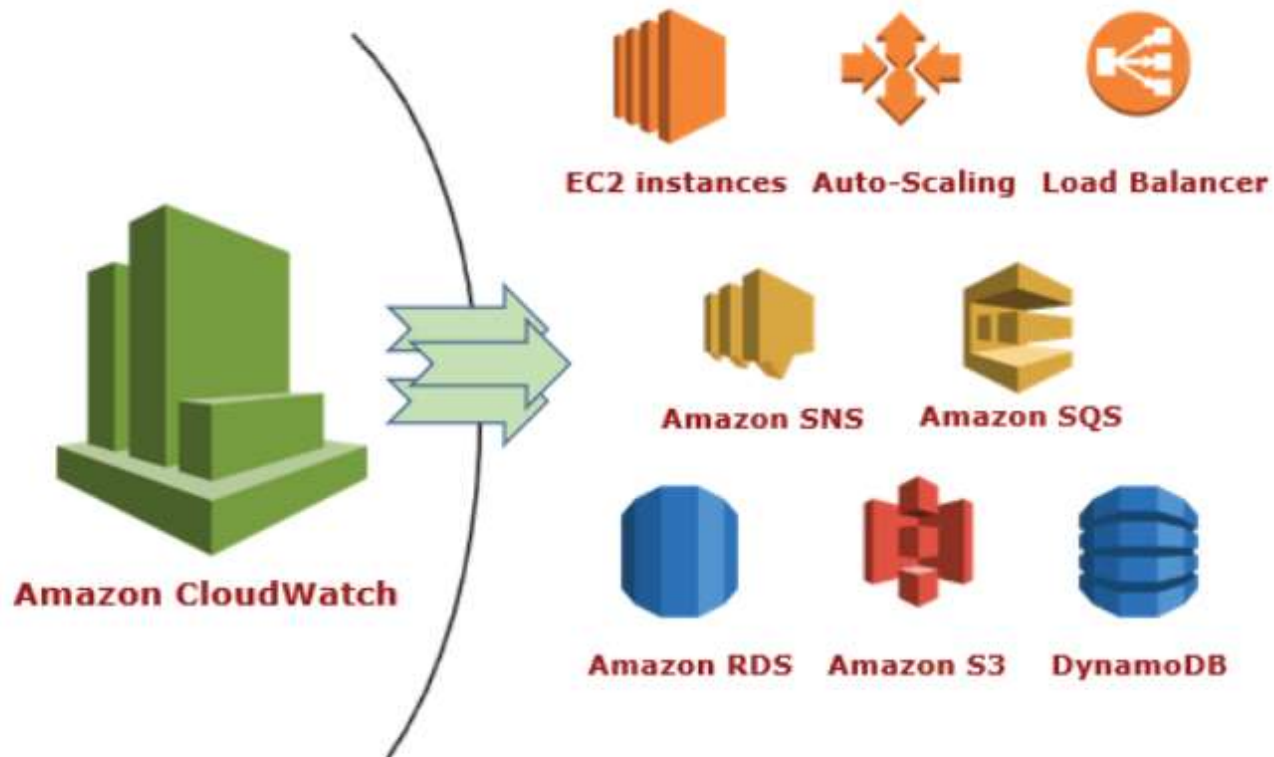


# Amazon CloudWatch



# Amazon CloudWatch

## What Is Amazon CloudWatch?

Amazon CloudWatch is the component of Amazon Web Services that provides real-time monitoring of AWS resources and customer applications running on Amazon infrastructure.

Amazon CloudWatch allows administrators to easily monitor multiple instances and resources from one console

# Amazon CloudWatch

Enables robust monitoring of resources like :

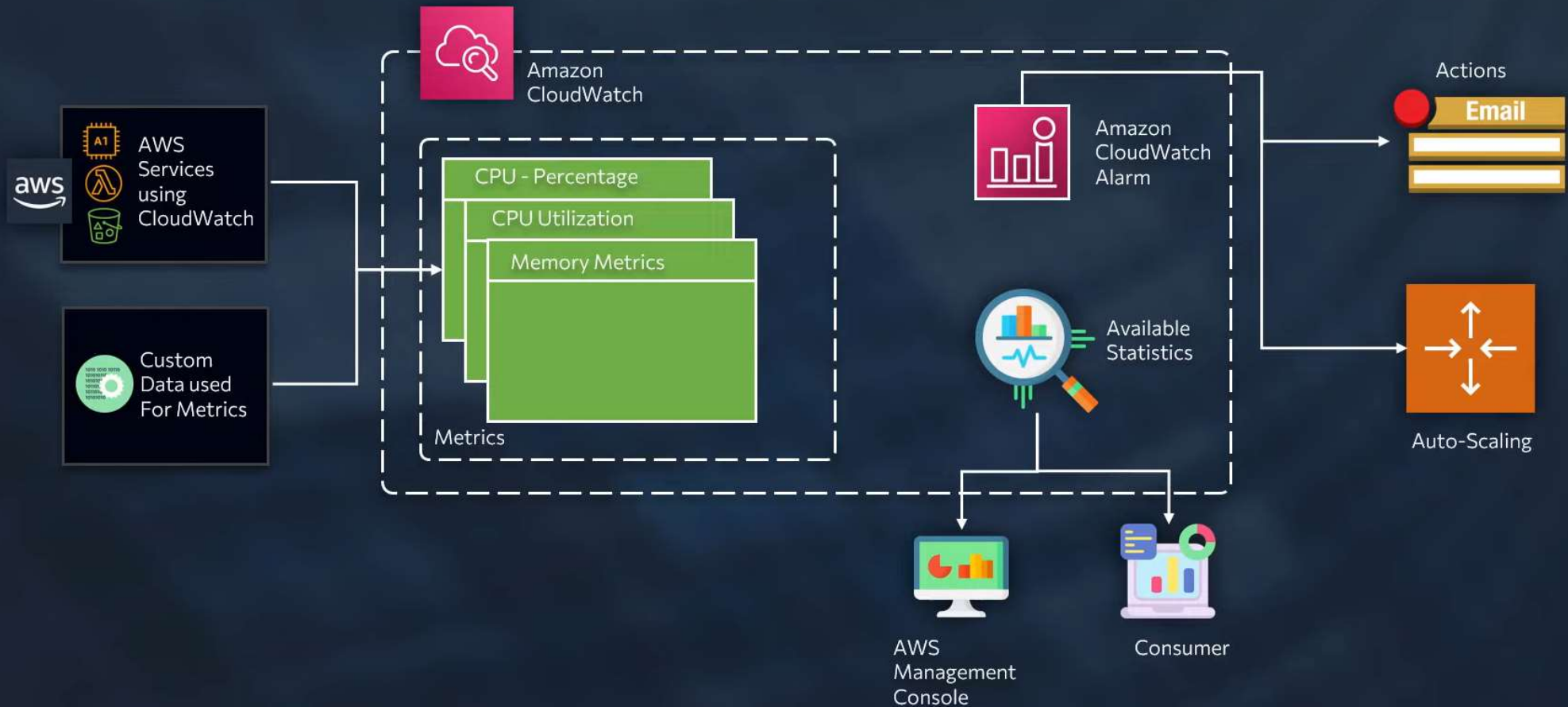
- Virtual instances hosted in Amazon EC2
- Databases located in Amazon RDS
- Data stored in Amazon S3
- Elastic Load Balancer
- Auto-Scaling Groups
- Other resources

# Amazon CloudWatch

Monitors, stores, and provides access to system and application log files  
Provides a catalog of standard reports that you can use to analyze trends and monitor system performance  
Provides various alert capabilities, including rules and triggers high resolutions alarms, and sends notifications  
Collects and provides a real-time presentation of operational data in the form of key metrics like CPU utilization, disk storage, etc.

# Amazon CloudWatch

## HOW AMAZON CLOUDWATCH WORKS



# Amazon CloudWatch

## **Features of Amazon CloudWatch**

The features of Amazon CloudWatch offer 2 major services: Logging and Metrics. Basically, these 2 services are combined from the CloudWatch.

### **AWS CloudWatch Logging Service**

Includes storing, monitoring, viewing, capturing, and managing service and application logs

### **AWS CloudWatch Metrics Services**

CloudWatch offers metrics services that include capturing and managing resource performance and operational metrics.

# Amazon CloudWatch

- **CloudWatch Logs insights** – An interactive tool for log query that helps in visualizing and analyzing log data. Whether it is about creating time-series graphs to visualize the data or publishing to CloudWatch dashboard, the log insights tool assists in filtering and aggregating log data.
- **CloudWatch Logs** – With the help of this feature, users can collect and store logs for various AWS services like AWS CloudTrail, AWS API Gateway, etc, or for specific applications and on-premise resources.

# Amazon CloudWatch

- **CloudWatch Alarms** – The CloudWatch Alarm constantly keeps on monitoring the CloudWatch metrics. It raises an alert if the metric (or metrics) exceeds the set/specified thresholds. The alarm's status can also be displayed on the CloudWatch dashboard.
- **Auto Scaling** – AWS auto-scaling of CloudWatch is responsible for the automation of capacity and resource planning.
- **AWS Integration** – CloudWatch is known to facilitate integration with AWS Identity and Access management. These integration features give a management console, ownership to manage and control access to CloudWatch data and resources.



# Amazon CloudWatch

**CloudWatch Events** – It picks for the state changes to the AWS resources and is responsible for creating a near-to-real-time stream of events routed to targets for processing. Eventually, the targets are notified of the state changes with the help of these events.

# Amazon CloudWatch

## Benefits of CloudWatch

CloudWatch: Easy integration of system based on AWS EC2 instances

- Stability and Reliability
- Effective monitoring of AWS resources
- Facilitates notification detected via Amazon SNS