# Amazon CloudWatch

* *Amazon CloudWatch* is a service that you can use to monitor your AWS resources and your applications in real time.
* With Amazon CloudWatch, you can collect and track metrics, create alarms that send notifications, and make changes to the resources being monitored based on rules you define.
* You can specify parameters for a metric over a time period and configure alarms and automated actions when a threshold is reached.
* ***Basic monitoring***sends data points to Amazon CloudWatch every five minutes for a limited number of preselected metrics at no charge.
* ***Detailed monitoring***sends data points to Amazon CloudWatch every minute and allows data aggregation for an additional charge.
* Amazon CloudWatch metrics can be retrieved by performing a GET request.
* Amazon CloudWatch does not aggregate data across regions but can aggregate across Availability Zones within a region.
* Amazon CloudWatch supports an Application Programming Interface (API) that allows programs and scripts to PUT metrics into Amazon CloudWatch as name-value pairs that can then be used to create events and trigger alarms in the same manner as the default Amazon CloudWatch metrics.
* Logs can be retained indefinitely or according to an aging policy that will delete older logs as no longer needed.
* A **CloudWatch Logs agent** is available that provides an automated way to send log data to CloudWatch Logs for Amazon EC2 instances running Amazon Linux or Ubuntu. You can use the Amazon CloudWatch Logs agent installer on an existing Amazon EC2 instance to install and configure the CloudWatch Logs agent. After installation is complete, the agent confirms that it has started and it stays running until you disable it.
* Each AWS account is **limited to 5,000 alarms per AWS account**, and **metrics data is retained for two weeks by default** (at the time of this writing). If you want to keep the data longer, you will need to move the logs to a persistent store like Amazon S3 or Amazon Glacier.