CloudWatch Monitoring Supported AWS Services

* CloudWatch offers either basic or detailed monitoring for supported AWS services.
* **Basic** monitoring means that a service sends data points to CloudWatch **every five minutes**.
* **Detailed** monitoring means that a service sends data points to CloudWatch **every minute**.
* If the AWS service supports both basic and detailed monitoring, the basic would be enabled by default and the detailed monitoring needs to be enabled for details metrics

### AWS Services with Monitoring support

* **Auto Scaling**
  + By default, basic monitoring is enabled when the launch configuration is created using the AWS Management Console and detailed monitoring is enabled when the launch configuration is created using using the AWS CLI or an API
  + Auto Scaling sends data to CloudWatch **every 5 minutes by default, when created from Console.**
  + For an additional charge, you can **enable detailed monitoring** for Auto Scaling, which sends data to CloudWatch **every minute**.
* **Amazon CloudFront**
  + Amazon CloudFront sends data to CloudWatch **every minute by default**.
* **Amazon CloudSearch**
  + Amazon CloudSearch sends data to CloudWatch **every minute by default**.
* **Amazon CloudWatch Events**
  + Amazon CloudWatch Events sends data to CloudWatch **every minute by default**.
* **Amazon CloudWatch Logs**
  + Amazon CloudWatch Logs sends data to CloudWatch **every minute by default**.
* **Amazon DynamoDB**
  + Amazon DynamoDB sends data to CloudWatch**every minute for some metrics and every 5 minutes for other metrics**.
* **Amazon EC2 Container Service**
  + Amazon EC2 Container Service sends data to CloudWatch **every minute**.
* **Amazon ElastiCache**
  + Amazon ElastiCache sends data to CloudWatch **every minute.**
* **Amazon Elastic Block Store**
  + Amazon Elastic Block Store sends data to CloudWatch **every 5 minutes.**
  + **Provisioned IOPS SSD** (io1) volumes automatically **send one-minute** metrics to CloudWatch.
* **Amazon Elastic Compute Cloud**
  + Amazon EC2 sends data to CloudWatch **every 5 minutes by default**. For an additional charge, you can **enable detailed monitoring** for Amazon EC2, which sends **data to CloudWatch every minute**.
* **Elastic Load Balancing**
  + Elastic Load Balancing sends data to **CloudWatch every minute.**
* **Amazon Elastic MapReduce**
  + Amazon Elastic MapReduce sends data to **CloudWatch every 5 minutes.**
* **Amazon Elasticsearch Service**
  + Amazon Elasticsearch Service sends data to **CloudWatch every minute.**
* **Amazon Kinesis Streams**
  + Amazon Kinesis Streams sends data to **CloudWatch every minute.**
* **Amazon Kinesis Firehose**
  + Amazon Kinesis Firehose sends data to **CloudWatch every minute.**
* **AWS Lambda**
  + AWS Lambda sends data to **CloudWatch every minute.**
* **Amazon Machine Learning**
  + Amazon Machine Learning sends data to **CloudWatch every 5 minutes.**
* **AWS OpsWorks**
  + AWS OpsWorks sends data to **CloudWatch every minute.**
* **Amazon Redshift**
  + Amazon Redshift sends data to **CloudWatch every minute.**
* **Amazon Relational Database Service**
  + Amazon Relational Database Service sends data to **CloudWatch every minute.**
* **Amazon Route 53**
  + Amazon Route 53 sends data to **CloudWatch every minute.**
* **Amazon Simple Notification Service**
  + Amazon Simple Notification Service sends data to **CloudWatch every 5** minutes.
* **Amazon Simple Queue Service**
  + Amazon Simple Queue Service sends data to **CloudWatch every 5 minutes.**
* **Amazon Simple Storage Service**
  + Amazon Simple Storage Service sends data to **CloudWatch once a day.**
* **Amazon Simple Workflow Service**
  + Amazon Simple Workflow Service sends data to **CloudWatch every 5 minutes.**
* **AWS Storage Gateway**
  + AWS Storage Gateway sends data to CloudWatch **every 5 minutes.**
* **AWS WAF**
  + AWS WAF sends data to CloudWatch **every minute.**
* **Amazon WorkSpaces**
  + Amazon WorkSpaces sends data to CloudWatch **every 5 minutes.**

## AWS Certification Exam Practice Questions

1. What is the minimum time Interval for the data that Amazon CloudWatch receives and aggregates?
   1. One second
   2. Five seconds
   3. **One minute**
   4. Three minutes
   5. Five minutes
2. In the ‘Detailed’ monitoring data available for your Amazon EBS volumes, Provisioned IOPS volumes automatically send \_\_\_\_\_ minute metrics to Amazon CloudWatch.
   1. 3
   2. **1**
   3. 5
   4. 2
3. Using Amazon CloudWatch’s Free Tier, what is the frequency of metric updates, which you receive?
   1. **5 minutes**
   2. 500 milliseconds.
   3. 30 seconds
   4. 1 minute
4. What is the type of monitoring data (for Amazon EBS volumes) which is available automatically in 5-minute periods at no charge called?
   1. **Basic**
   2. Primary
   3. Detailed
   4. Local
5. A user has created an Auto Scaling group using CLI. The user wants to enable CloudWatch detailed monitoring for that group. How can the user configure this?
   1. When the user sets an alarm on the Auto Scaling group, it automatically enables detail monitoring
   2. **By default detailed monitoring is enabled for Auto Scaling**(Detailed monitoring is enabled when you create the launch configuration using the AWS CLI or an API)
   3. Auto Scaling does not support detailed monitoring
   4. Enable detail monitoring from the AWS console
6. A user is trying to understand the detailed CloudWatch monitoring concept. Which of the below mentioned services provides detailed monitoring with CloudWatch without charging the user extra?
   1. AWS Auto Scaling
   2. **AWS Route 53**
   3. AWS EMR
   4. AWS SNS
7. A user is trying to understand the detailed CloudWatch monitoring concept. Which of the below mentioned services does not provide detailed monitoring with CloudWatch?
   1. **AWS EMR**
   2. AWS RDS
   3. AWS ELB
   4. AWS Route53
8. A user has enabled detailed CloudWatch monitoring with the AWS Simple Notification Service. Which of the below mentioned statements helps the user understand detailed monitoring better?
   1. SNS will send data every minute after configuration
   2. There is no need to enable since SNS provides data every minute
   3. AWS CloudWatch does not support monitoring for SNS
   4. **SNS cannot provide data every minute**
9. A user has configured an Auto Scaling group with ELB. The user has enabled detailed CloudWatch monitoring on Auto Scaling. Which of the below mentioned statements will help the user understand the functionality better?
   1. It is not possible to setup detailed monitoring for Auto Scaling
   2. **In this case, Auto Scaling will send data every minute and will charge the user extra**
   3. Detailed monitoring will send data every minute without additional charges
   4. Auto Scaling sends data every minute only and does not charge the user