

Quiz: CloudWatch

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1. When monitoring resources, what is the minimum time interval for aggregating data?
 - A. 1 minute
 - B. 5 minutes
 - C. 15 minutes
 - D. 30 seconds
2. Are CloudWatch metrics accessible for terminated instances?
 - A. Yes
 - B. No
3. Which one of the choices is NOT correct about EC2 monitoring?
 - A. Basic monitoring collects metrics at 5-minute intervals
 - B. Detailed monitoring collects metrics at 1-minute intervals
 - C. Detailed monitoring collects additional metrics that are not available with basic monitoring
 - D. Basic monitoring is free while detailed monitoring may incur a small hourly charge
4. Memory utilization metrics are published automatically by EC2 instances to CloudWatch
 - A. True
 - B. False
5. You have a fleet of hundreds of EC2 instances. If there is a problem with AWS managed items like Physical host, network connectivity to host, and system power, how would you be able to track it and manage it?
 - A. CloudWatch System Status Checks
 - B. CloudWatch Instance Status Checks
 - C. Write your own monitoring scripts
 - D. Either System Status Check or Instance Status Check can be used
6. If there are problems with your instance like: network configuration, corrupt file system, kernel issues, exhausted memory, how would you be able to track and manage it?
 - A. CloudWatch System Status Checks
 - B. CloudWatch Instance Status Checks
 - C. Write your own monitoring scripts
 - D. Either System Status Check or Instance Status Check can be used
7. If you want to monitor an EC2 instance metric and would like to know if it crosses a threshold defined by you, what capability would you use?
 - A. CloudWatch
 - B. CloudWatch Alarms
 - C. CloudWatch Alerts
 - D. CloudWatch Logs
8. If you want to monitor your application generated log files, OS generated log files across a fleet of EC2 instances for errors, warnings or any other messages of interest, what capability can you use?
 - A. Write your own scripts to parse log and publish as custom metrics to CloudWatch
 - B. CloudWatch Alarms
 - C. CloudWatch Alerts

- D. CloudWatch Logs
9. You would like to aggregate CPU utilization across all your instances that use a particular Amazon Machine Image and compute statistics. In order to do this, you need:
- A. Basic Monitoring
 - B. Detailed Monitoring
 - C. Either Basic or Detailed Monitoring
 - D. Aggregation by Amazon Machine Image is not supported
10. You would like to monitor two different metrics in a AWS Service and take automated action based on the metric value. How many CloudWatch alarms would you need?
- A. One Alarm
 - B. Two Alarms

Answers:

1. A - Minimum aggregation time is 1 minute.
2. A - CloudWatch metrics are available for 2 weeks after EC2 instance is terminated
3. C – Difference between EC2 basic and detailed monitoring is in frequency of data collection. When you enable detailed monitoring, metrics are available at 1-minute frequency. Basic monitoring is at 5-minute frequency. Some larger instance types include detailed monitoring without extra charge. All other instance types incur a small hourly charge when you enable detailed monitoring. Detailed monitoring also allows you to aggregate data across groups of similar instances.
4. B - Memory utilization, swap file and page file metrics are not automatically provided by CloudWatch. AWS provides scripts that you can use to collect and publish to CloudWatch
5. D - System status check would identify the issues with AWS managed items. Instance status check would also fail if a system status check fails. So, either one can be used. Both are automatically performed by AWS at 1-minute frequency (for both basic and detailed monitoring)
6. B - Instance status check would detect instance level issues. Start with instance status check and if needed add additional scripts to cover your specific application scenarios
7. B – CloudWatch Alarm allows you to specify a threshold and automatically perform configured actions when metric breaches the threshold and persists for the specified evaluation interval.
8. D – CloudWatch Logs provides a flexible mechanism to collect, retain and aggregate log data generated by OS or application
9. B – Detailed monitoring also allows you to aggregate data across groups of similar instances.
10. B - Each alarm can monitor one metric. So, you would need two metrics