CloudWatch Alarms

1. **Status Check Alarms** trigger when a status check fails (gets set to zero). Status checks can be tied to a system-wide or instance metric
2. **High-Resolution Alarm** is tied to a high-resolution metric. Because high-resolution metrics update every second, High-Resolution Alarms can be triggered based on metric values within a ten-second period. If you set an alarm on a high-resolution metric, you can specify a high-resolution alarm with a period of 10 seconds or 30 seconds, or you can set a regular alarm with a period of any multiple of 60 seconds. There is a higher charge for high-resolution alarms
3. **Percentile-base CloudWatch Alarms** address the challenge of monitoring a metric when there’s not enough data for a good statistical assessment. You can choose to have the alarm evaluate the statistic anyway and possibly change the alarm state. Or, you can have the alarm ignore the metric while the sample size is low, and wait to evaluate it until there is enough data to be statistically significant.
4. You can set an alarm on the result of a **math expression** that is based on one or more CloudWatch metrics. A math expression used for an alarm can include as many as 10 metrics. Each metric must be using the same period.

For an alarm based on a math expression, you can specify how you want CloudWatch to treat missing data points for the underlying metrics when evaluating the alarm.