You want to automatically restart an EC2 instance when it crashes. How will you set this up using CloudWatch?

Answer:

There are a couple of ways to do this, but one simple way is using a **CloudWatch Alarm + EC2 action**:

- Go to CloudWatch → Alarms → Create Alarm
- Choose the **StatusCheckFailed_Instance** metric for the EC2
- Set the threshold: if the check fails for **2 consecutive minutes**
- In the "Actions" section, choose **EC2 action → Reboot or Recover instance**

🔧 **Note:** Reboot just restarts the instance, while Recover moves it to healthy hardware (only for Nitro-based instances).

Example:

For a legacy app on EC2 (not behind ASG), the instance used to freeze due to memory leaks. I set up a StatusCheckFailed_Instance alarm with an automatic recovery action — this saved us from downtime and manual intervention at night.

What is the main difference between the **"Reboot"** and **"Recover"** actions in a CloudWatch Alarm for EC2?

A. Reboot moves the instance to new hardware, Recover just restarts the OS.

B. Reboot restarts the OS on the same hardware, Recover moves the instance to healthy hardware if there's a hardware issue.

C. Both actions are identical but have different names for historical reasons.

D. Reboot deletes the instance and creates a new one, Recover keeps the same instance ID.

Correct Answer: ✅ **B**

Explanation:

Reboot simply restarts the OS on the same physical host. Recover replaces the underlying hardware if it has failed (only supported on certain instance families like Nitro-based instances), preserving the same instance ID, IP addresses, and metadata.

You set a CloudWatch Alarm with the **Recover instance** action, but during testing, the instance does not recover after a host failure. What is the MOST likely reason?

A. The instance is not using EBS-backed root volume.

B. The instance type does not support automatic recovery.

C. The CloudWatch alarm threshold is set too high.

D. StatusCheckFailed_System metric is disabled.

Correct Answer: ✅ B

Explanation:

Not all EC2 instance types support the automatic recovery feature. For example, older generation or non-Nitro instances may not support recovery. You must check AWS documentation for supported instance types before enabling this feature.