**To create an alarm to reboot an instance using the Amazon CloudWatch console**

1. Open the CloudWatch console at <https://console.aws.amazon.com/cloudwatch/>.
2. In the navigation pane, choose **Alarms**, **Create Alarm**.
3. For the **Select Metric** step, do the following:
   1. Under **EC2 Metrics**, choose **Per-Instance Metrics**.
   2. Select the row with the instance and the **StatusCheckFailed\_Instance** metric.
   3. For the statistic, choose **Minimum**.
   4. Choose a period (for example, **1 Minute**) and choose **Next**.
4. For the **Define Alarm** step, do the following:
   1. Under **Alarm Threshold**, type a unique name for the alarm (for example, Reboot EC2 instance) and a description of the alarm (for example, Reboot EC2 instance when health checks fail). Alarm names must contain only ASCII characters.
   2. Under **Whenever**, for **is**, choose **>** and type **0**. For **for**, type **3** consecutive periods.

A graphical representation of the threshold is shown under **Alarm Preview**.

* 1. Under **Notification**, for **Send notification to**, choose an existing SNS topic or create a new one.

To create an SNS topic, choose **New list**. For **Send notification to**, type a name for the SNS topic (for example, Reboot\_EC2\_Instance). For **Email list**, type a comma-separated list of email addresses to be notified when the alarm changes to the ALARM state. Each email address is sent a topic subscription confirmation email. You must confirm the subscription before notifications can be sent to an email address.

* 1. Choose **EC2 Action**.
  2. For **Whenever this alarm**, choose **State is ALARM**. For **Take this action**, choose **Reboot this instance**.
  3. Choose **Create Alarm**.

# Subscribing a function to a topic

1. Sign in to the [Amazon SNS console](https://console.aws.amazon.com/sns/home).
2. On the navigation panel, choose **Topics**.
3. On the **Topics** page, choose a topic.
4. In the **Subscriptions** section, choose **Create subscription**.
5. On the **Create subscription** page, in the **Details** section, do the following:
   1. Verify the chosen **Topic ARN**.
   2. For **Protocol** choose AWS Lambda.
   3. For **Endpoint** enter the ARN of a function.
   4. Choose **Create subscription**.

When a message is published to an SNS topic that has a Lambda function subscribed to it, the Lambda function is invoked with the payload of the published message.