



Smart Alarms for Humans

18th of April 2019

Monitoring



Monitoring system should address two questions: what's broken, and why?
The “what's broken” indicates the symptom. The “why” indicates a cause.





Monitoring vs observability

Monitoring

- reports overall system **health**
- key systems metrics, logs, dashboards
- for alerting, troubleshooting, system performance, capacity planning

Observability

- granular insights into system **behavior**
- detailed metrics, enhanced monitoring, log aggregation, dashboards, data analytics, machine learning
- for alerting, debugging complex troubleshooting, system performance, capacity planning

Smart Alarm

Standard Alarm E-mail



ALARM: "80CPUUtilization" in EU (Ireland)

You are receiving this email because your Amazon CloudWatch Alarm "80CPUUtilization" in the EU (Ireland) region has entered the ALARM state, because "Threshold Crossed: 3 out of the last 3 datapoints [99.66666666666666 (22/10/18 16:20:00), 100.0 (22/10/18 16:19:00), 99.0163934426229 (22/10/18 16:18:00)] were greater than or equal to the threshold (80.0) (minimum 3 datapoints for OK -> ALARM transition)." at "Monday 22 October, 2018 16:22:23 UTC".

View this alarm in the AWS Management Console:

<https://console.aws.amazon.com/cloudwatch/home?region=eu-west-1#s=Alarms&alarm=80CPUUtilization>

Alarm Details:

- Name: 80CPUUtilization
- Description: >=80% CPUUtilization during 3 minutes
- State Change: OK -> ALARM
- Reason for State Change: Threshold Crossed: 3 out of the last 3 datapoints [99.66666666666666 (22/10/18 16:20:00), 100.0 (22/10/18 16:19:00), 99.0163934426229 (22/10/18 16:18:00)] were greater than or equal to the threshold (80.0) (minimum 3 datapoints for OK -> ALARM transition).
- Timestamp: Monday 22 October, 2018 16:22:23 UTC
- AWS Account: 539199393808

Threshold:

- The alarm is in the ALARM state when the metric is GreaterThanOrEqualToThreshold 80.0 for 60 seconds.

Monitored Metric:

- MetricNamespace: AWS/EC2
- MetricName: CPUUtilization
- Dimensions: [InstanceId = i-05454771ee8e153ef]
- Period: 60 seconds
- Statistic: Average
- Unit: not specified

State Change Actions:

- OK:
- ALARM: [arn:aws:sns:eu-west-1:539199393808:korniichuk]
- INSUFFICIENT_DATA:

Smart Alarm E-mail

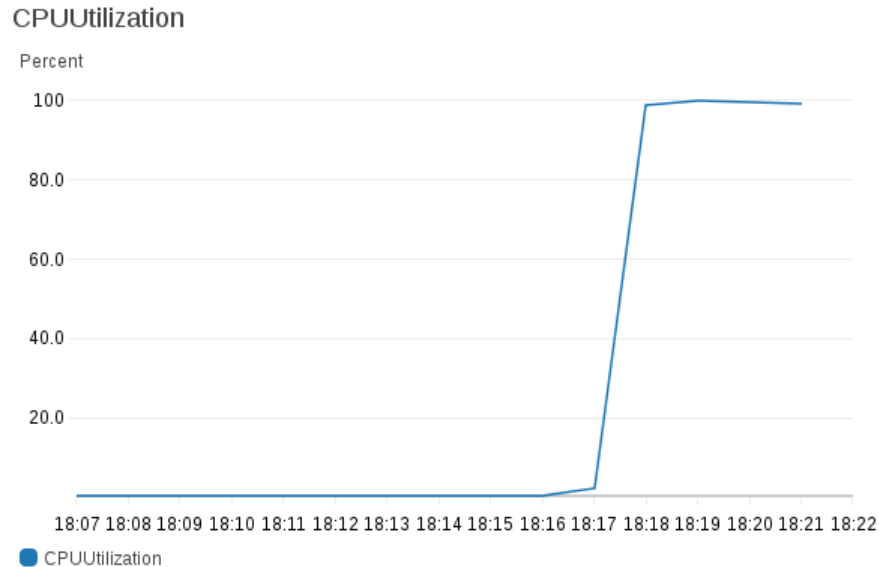


 CPU utilization on i-05454771ee8e153ef is CRITICAL

CPU utilization is the sum of work handled by a Central Processing Unit.

Runbook: <https://pncorp.atlassian.net/wiki/spaces/NOPS/pages/914850046/CPU+utilization>

CloudWatch: <https://amzn.to/2S8Goda>



Standard Alarm Slack



incoming-webhook APP 4:34 PM

Request Payment ERROR state is now ALARM: Threshold Crossed: 1 out of the last 1 datapoints [1.0 (12/11/18 16:34:00)] was greater than or equal to the threshold (1.0) (minimum 1 datapoint for OK -> ALARM transition).

Smart Alarm Slack



Amazon CloudWatch APP 4:34 PM

Request Payment ERROR

Reason 🔥

Threshold Crossed: 1 out of the last 1 datapoints [1.0 (12/11/18 16:34:00)] was greater than or equal to the threshold (1.0) (minimum 1 datapoint for OK -> ALARM transition). (20 kB) ▾

Confluence

<http://bit.ly/2PRcGez>

CloudWatch

<https://amzn.to/2DuNrJ9>

