Cloud Computing Architecture

More on Scaling and CloudWatch Revisited

SWINBURNE UNIVERSITY OF TECHNOLOGY

More on Scaling and CloudWatch Revisited

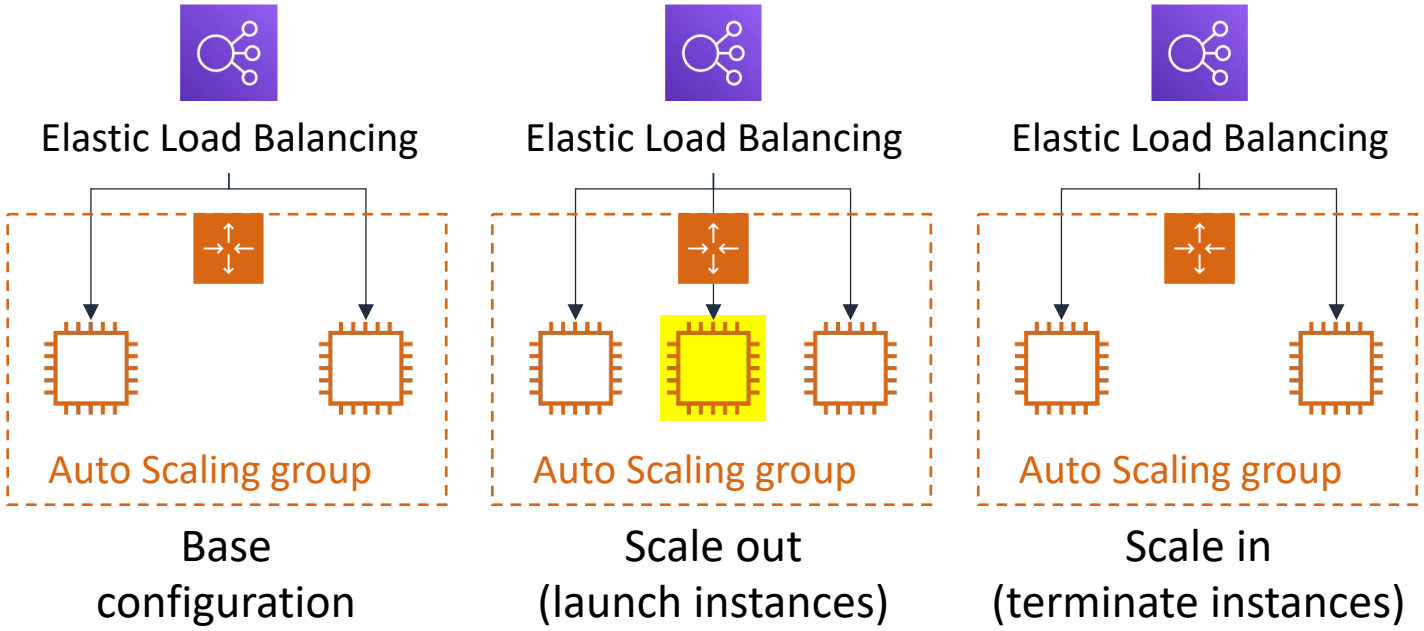
This presentation:

- More on AutoScaling
  - Vertical vs Horizonal Scaling
  - ELB, CloudWatch, Auto Scaling
  - CloudWatch Revisited
  - CloudWatch Alarms and Actions
  - Monitoring Integration Pattern
  - CloudWatch Logs

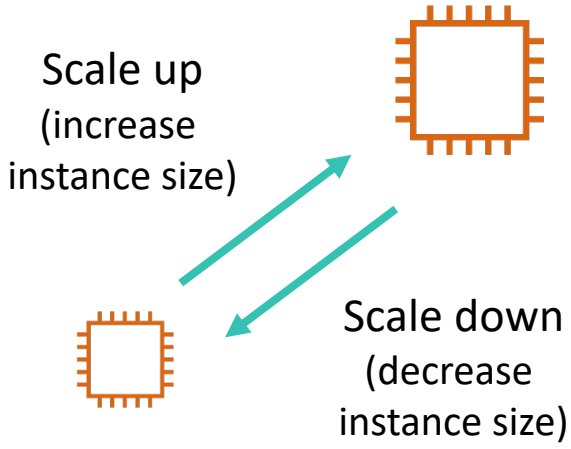
What is scaling?

A technique that is used to achieve elasticity

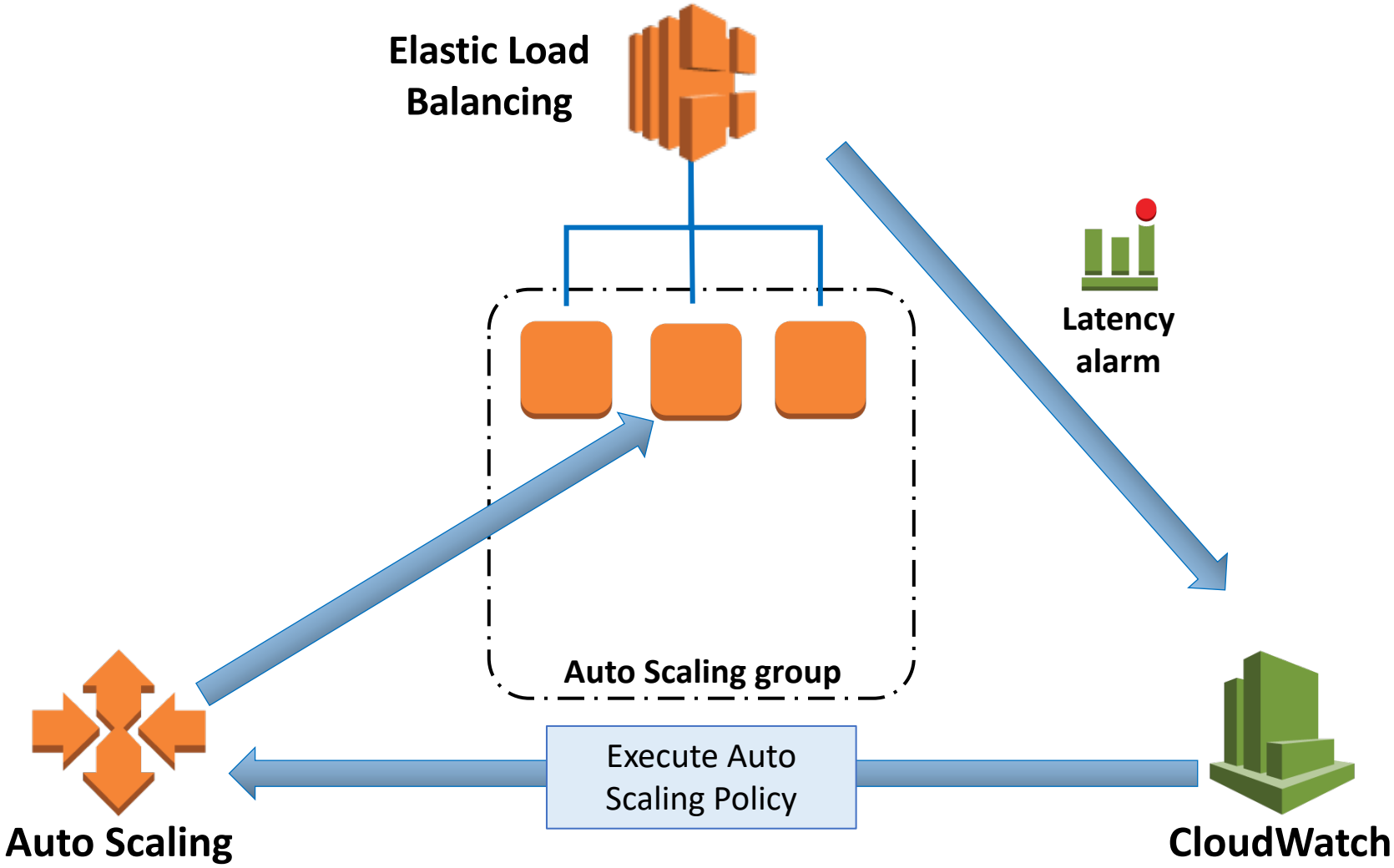
Horizontal scaling



Vertical scaling

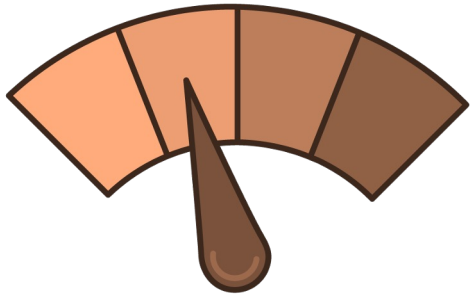


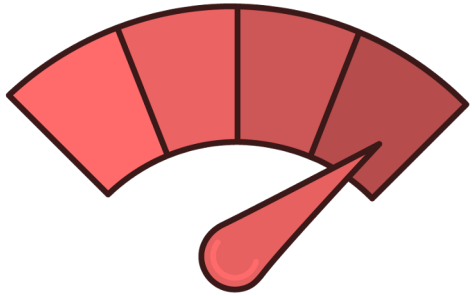
Elastic Load Balancing, CloudWatch, and Auto Scaling



Amazon CloudWatch

Amazon CloudWatch



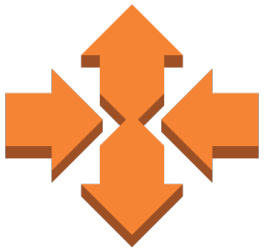


- Monitors –
  - AWS resources
  - Applications that run on AWS
- Collects and tracks –
  - Standard metrics
  - Custom metrics
- Alarms –
  - Send notifications to an Amazon SNS topic
  - Perform Amazon EC2 Auto Scaling or Amazon EC2 actions
- Events –
  - Define rules to match changes in AWS environment and route these events to one or more target functions or streams for processing

CloudWatch Alarms and Actions

CloudWatch alarms:
Measure a single metric and perform one or more actions

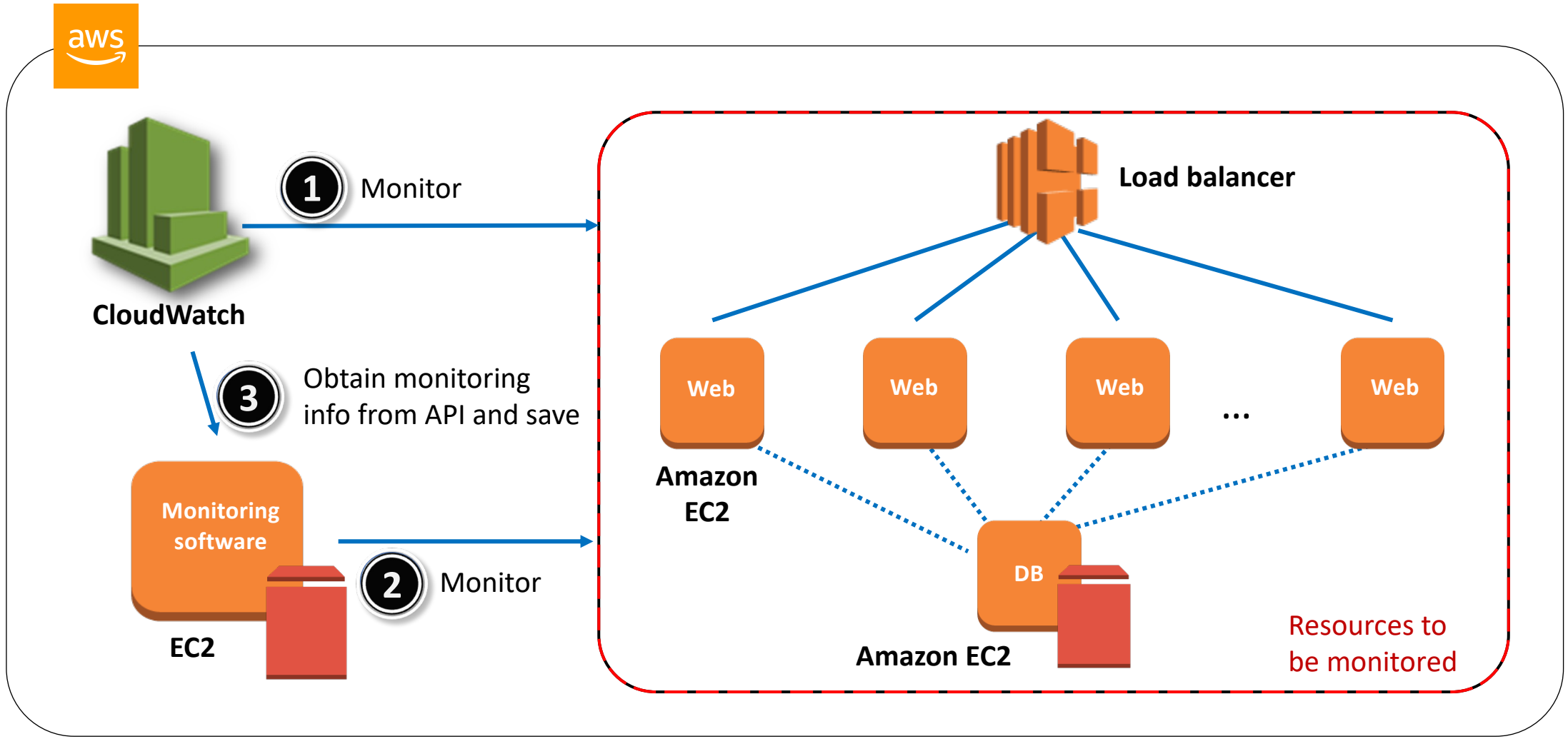
Stop, terminate, reboot, or recover an Amazon EC2 instance



Scale an Auto Scaling group in or out

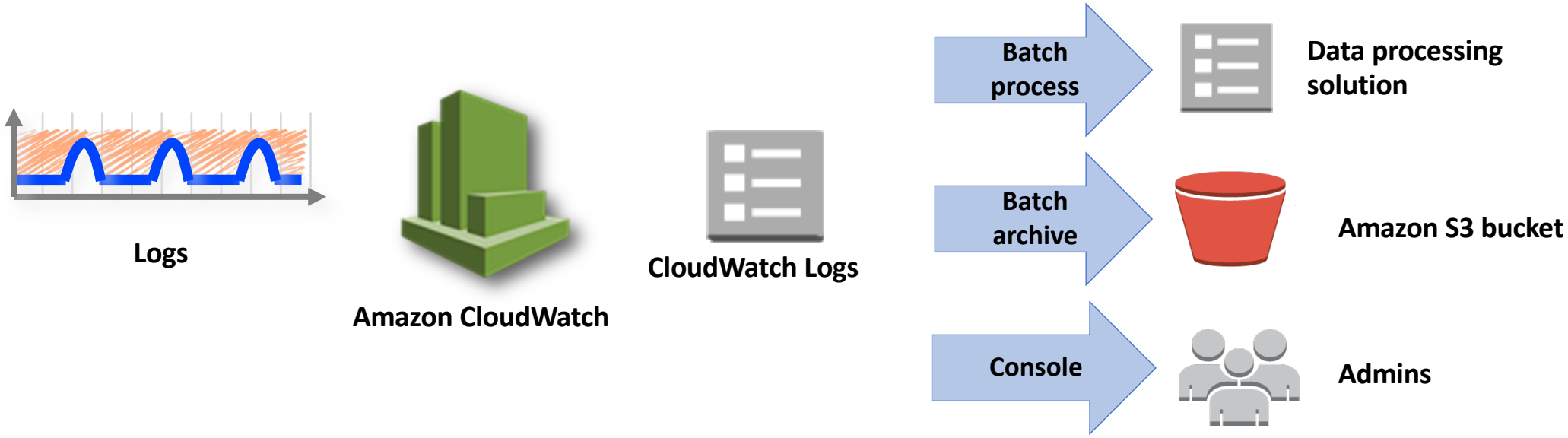
Send message to Amazon Simple Notification Service (SNS)

Monitoring Integration Pattern



Learn more.

CloudWatch Logs



Your metrics can be stored durably in CloudWatch as CloudWatch Logs.

- Admins and other parties review CloudWatch logs directly via AWS Management Console.
- Logs can be stored in Amazon S3, to be accessed by other services or another user.
- Logs can be streamed in real time to data-processing solutions like Amazon Kinesis Streams or AWS Lambda.

Learn more.

Lecture References

Recommend Viewing

Swinburne Lecture – High Level Overview

AWS Academy – Deeper dive

ACA Module 9