

# AWS Fundamentals course

2017, November, 14 1:13 PM

Application Load balancer:

- Static or Elastic IPs

Auto Scaling

- 1) Launch Config
- 2) Auto Scaling Group
  - a. Contains multiple EC2 instances
    - i. If one fails replace it
  - b. Monitored using Amazon Cloud Watch
- 3) Optional
  - a. Scheduled Action
  - b. Scaling Policy

Cloud watch alarm examples

- 1) CPU > 80% for 5 periods of 1 min
  - a. Add 100% (Scaling policies)
- 2) CPU < 40% for 5 periods of 1 minute
  - a. Remove 50%

To allow applications to spin up new machines elastically

- \*\*Don't store state locally
- \*\*Don't rely on fixed IP addresses
- \*\*Don't use sticky sessions

Security:

Shared Responsibility Model

Resource Based Permissions

AWS CloudTrail

AWS Key Management Service

- Does not store encrypted data key
  - o Needs to be handles by application

AWS Certificate Manager

\*\*\*\*\* DO NOT EMBED KEYS INTO CODE\*\*\*\*\*

- Instead utilize roles which are attached to EC2 instances and behind the scenes the AWS Token Service will request a Token and authenticate based on what we are trying to do
- Roles automatically last for 15 minutes and will auto rene
- Role is applied to EC2 instances when it is created and any application running on that EC2 instance will have access to the role