EC2 Auto Scaling

AGENDA

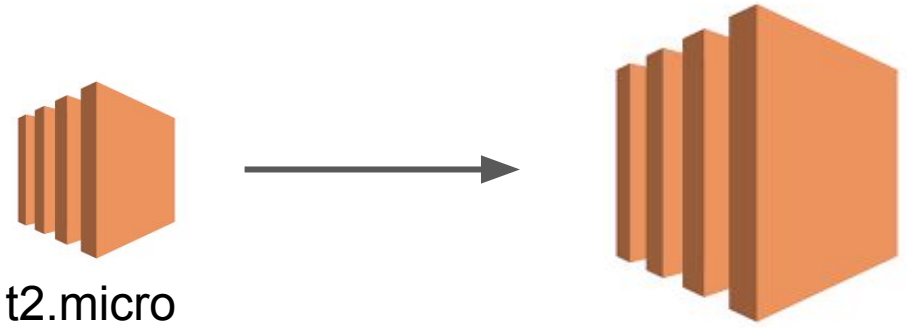
- Part 1: Anatomy of Auto Scaling
- Part 2: Hands on

Part 1: Anatomy of Auto Scaling

Auto Scaling

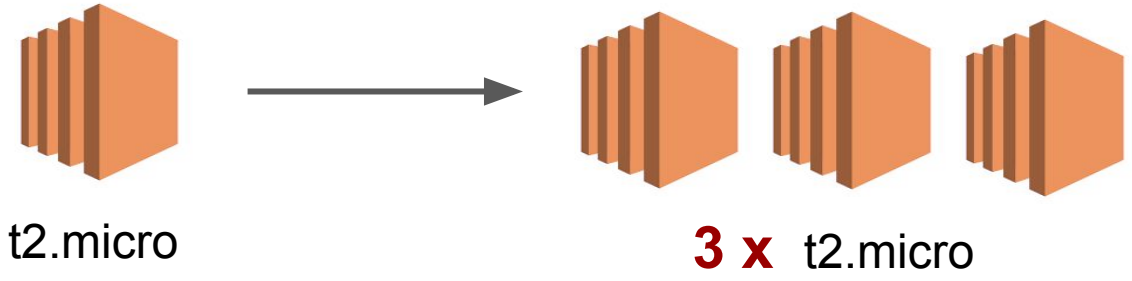
What is Scaling?

Vertical Scaling



Scale Up / Down

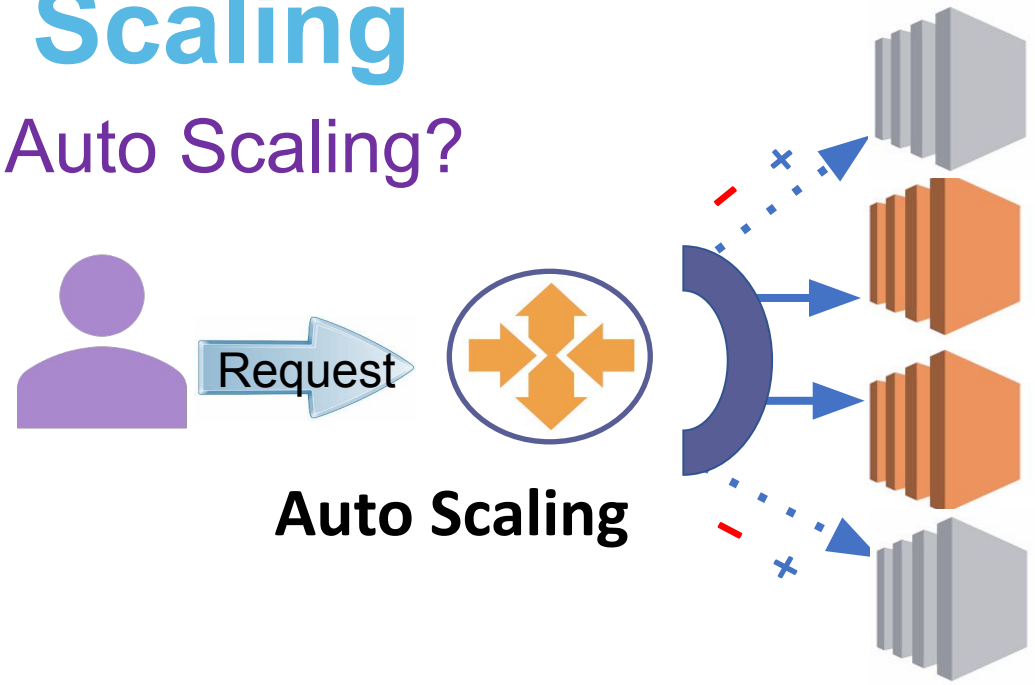
Horizontal Scaling



Scale Out / In

Auto Scaling

What is Auto Scaling?

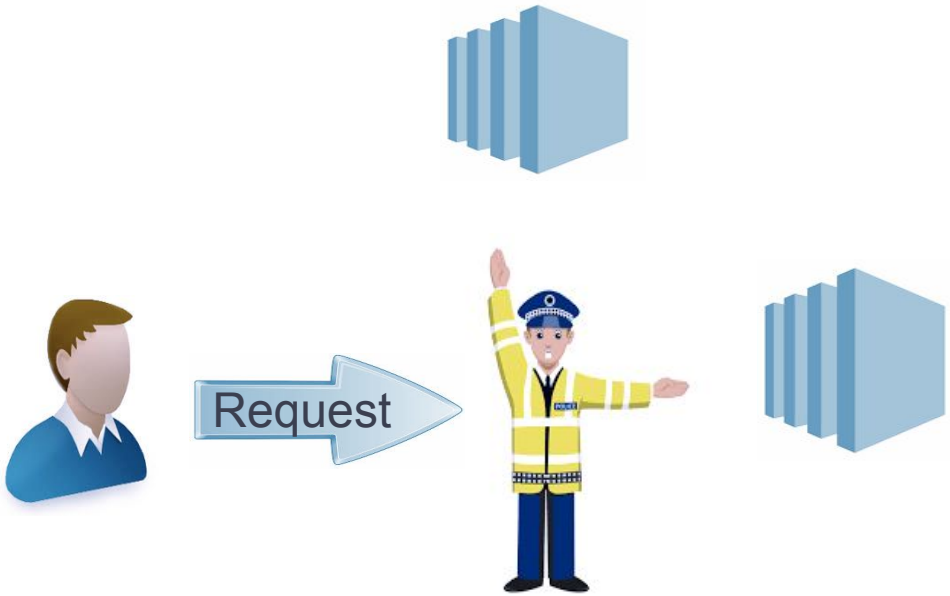


- Amazon EC2 Auto Scaling is a component that helps you ensure that you have the correct number of Amazon EC2 instances available to handle the load for your application.
- Auto Scaling adds or removes instances to keep your system steady state.
- You can automate the increasing or decreasing of virtual machines depending on your policy.

Auto Scaling

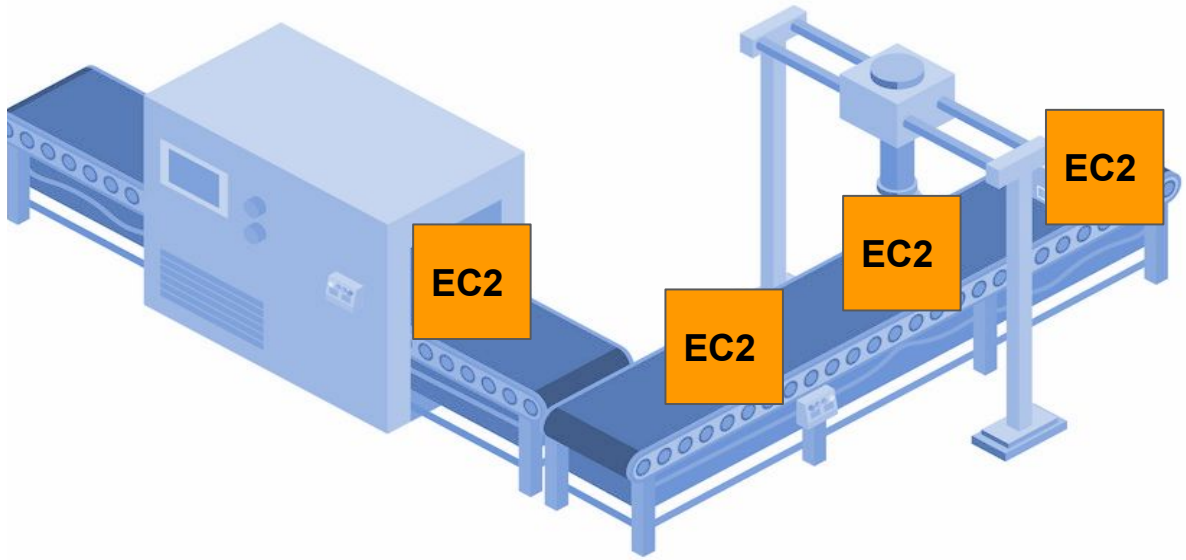
Auto Scaling vs Load Balancer

Load Balancer



Distributing the traffic across the existing instances

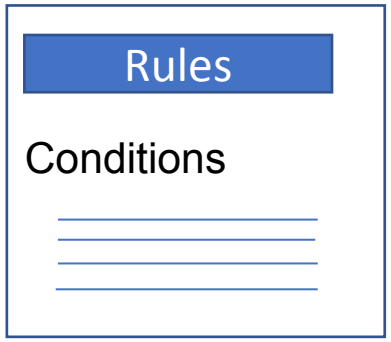
Auto Scaling



- **Launch** new instances
- **Terminate** the existing instances

Auto Scaling

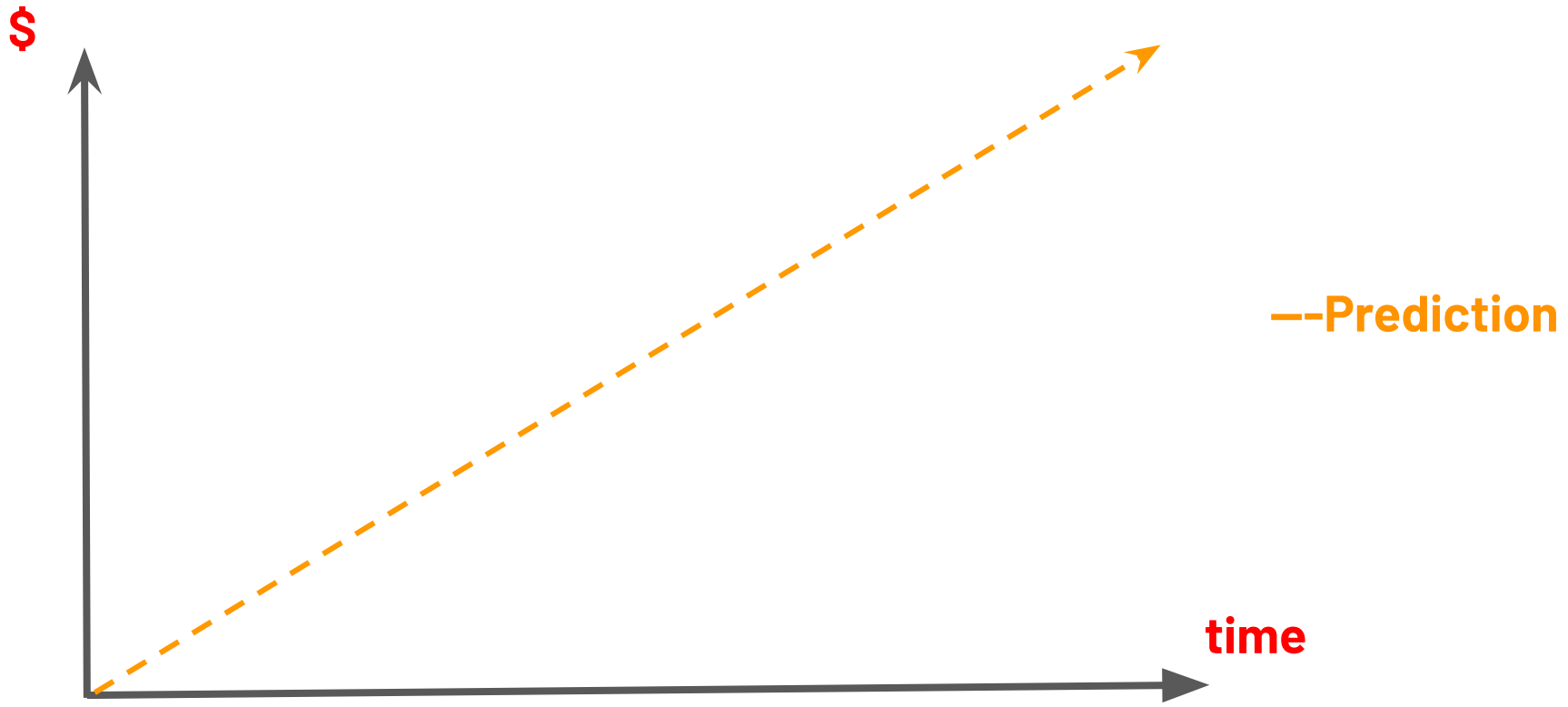
Features of Auto Scaling



- Auto Scaling Policy
- Launch Configurations or Launch Templates.
- Fault tolerance.
- Compatible with Elastic Load Balancer
- Better Cost Management.

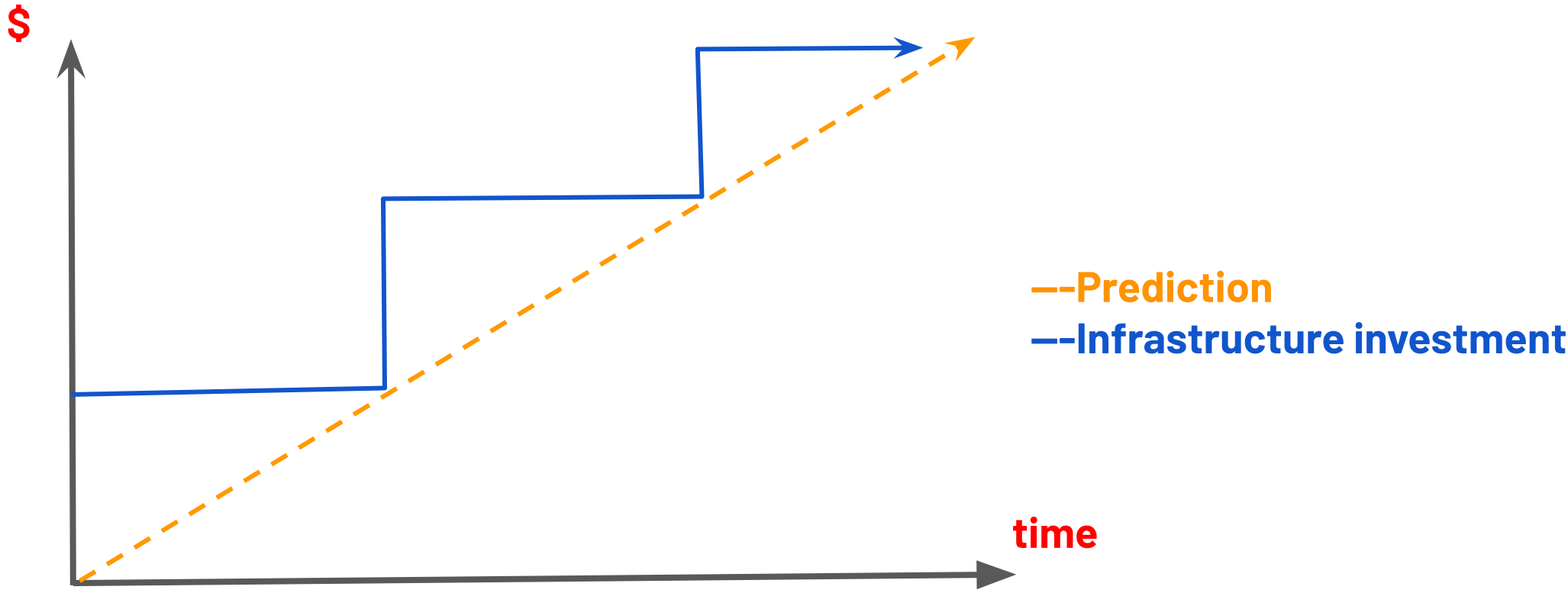
Auto Scaling

Better Cost Management



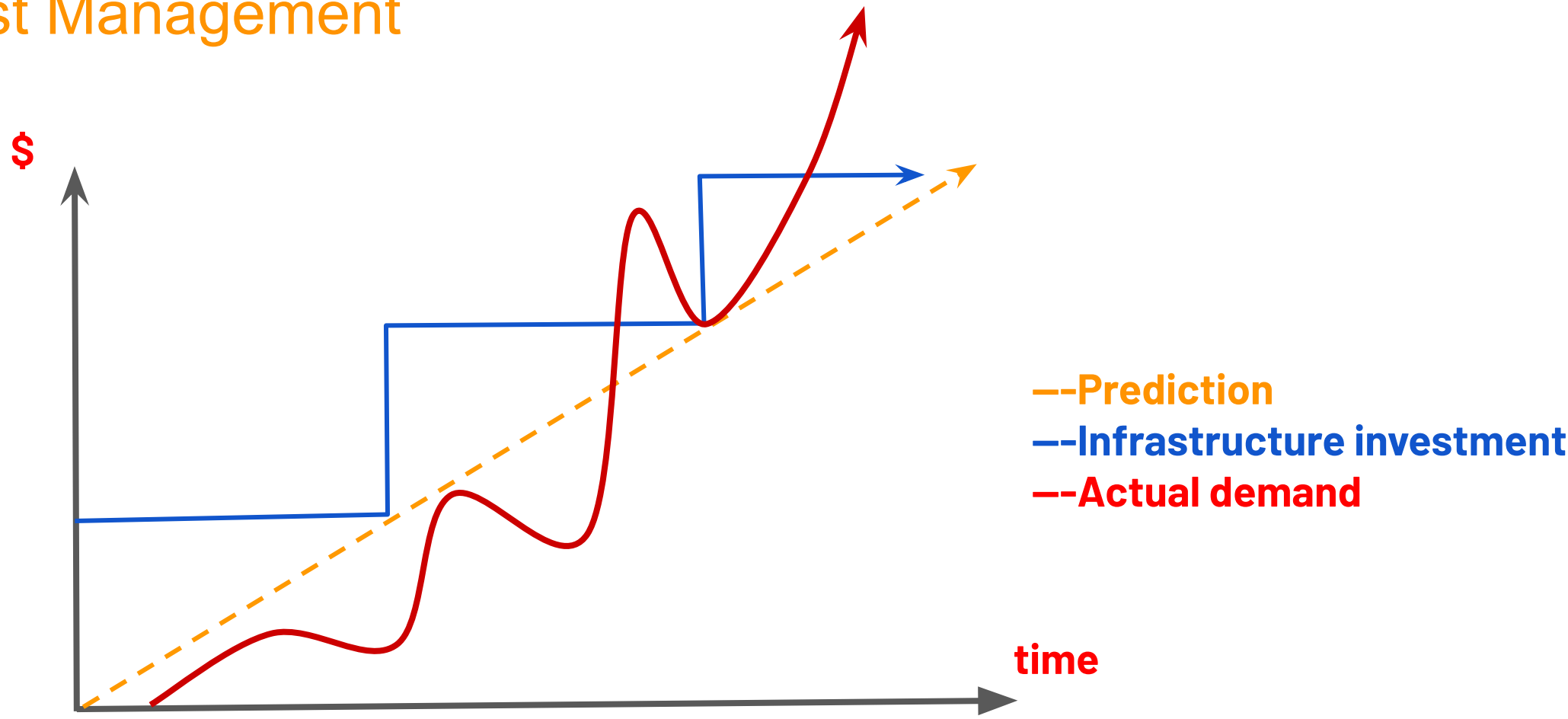
Auto Scaling

Better Cost Management



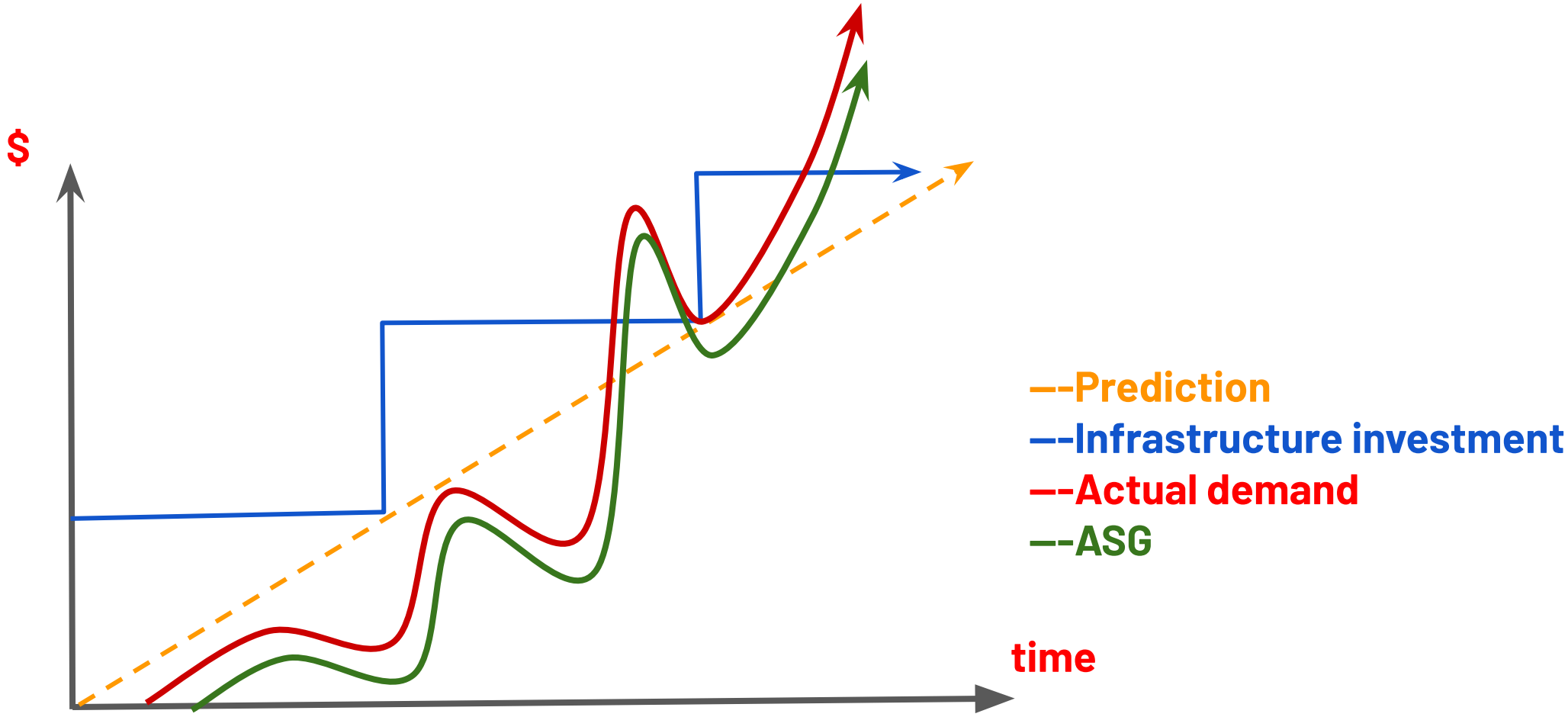
Auto Scaling

Better Cost Management



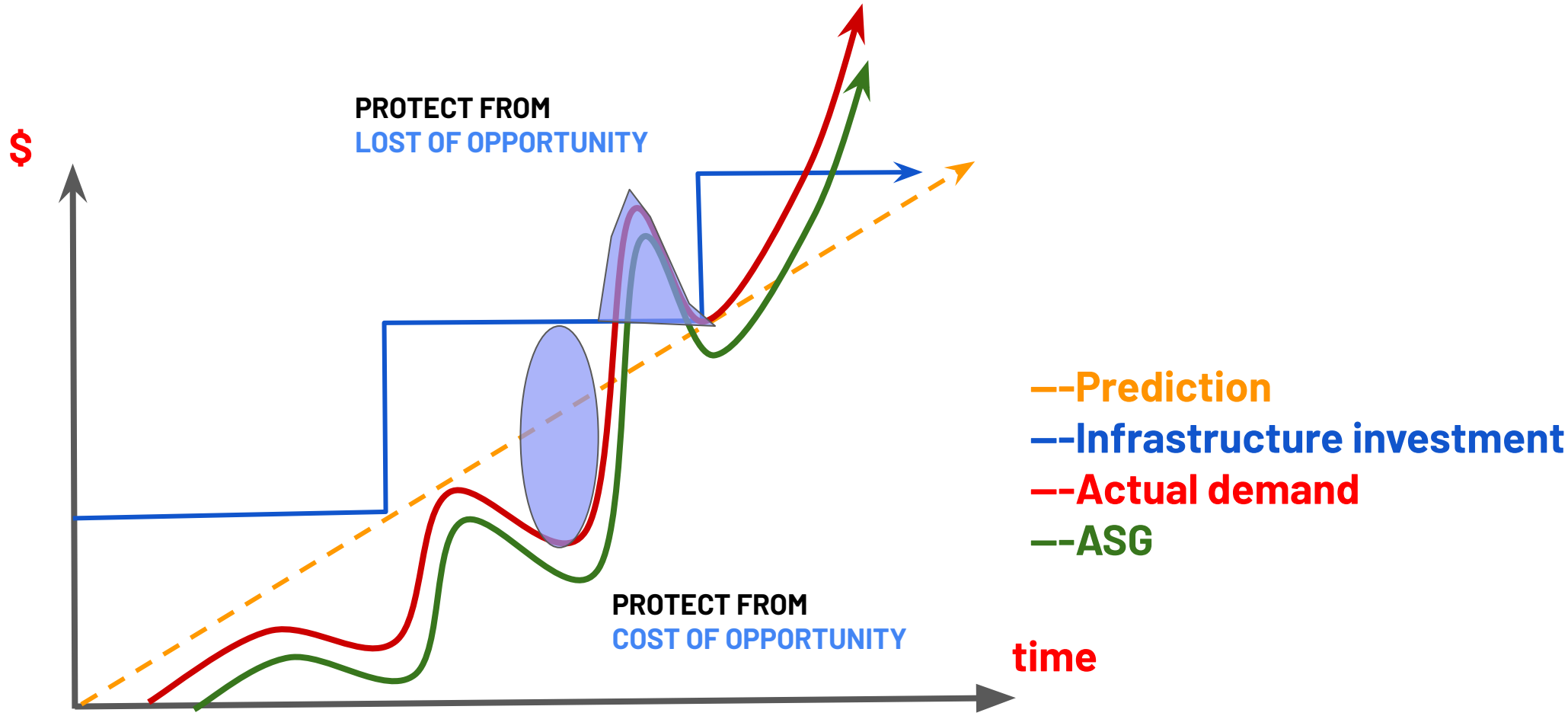
Auto Scaling

Better Cost Management



Auto Scaling

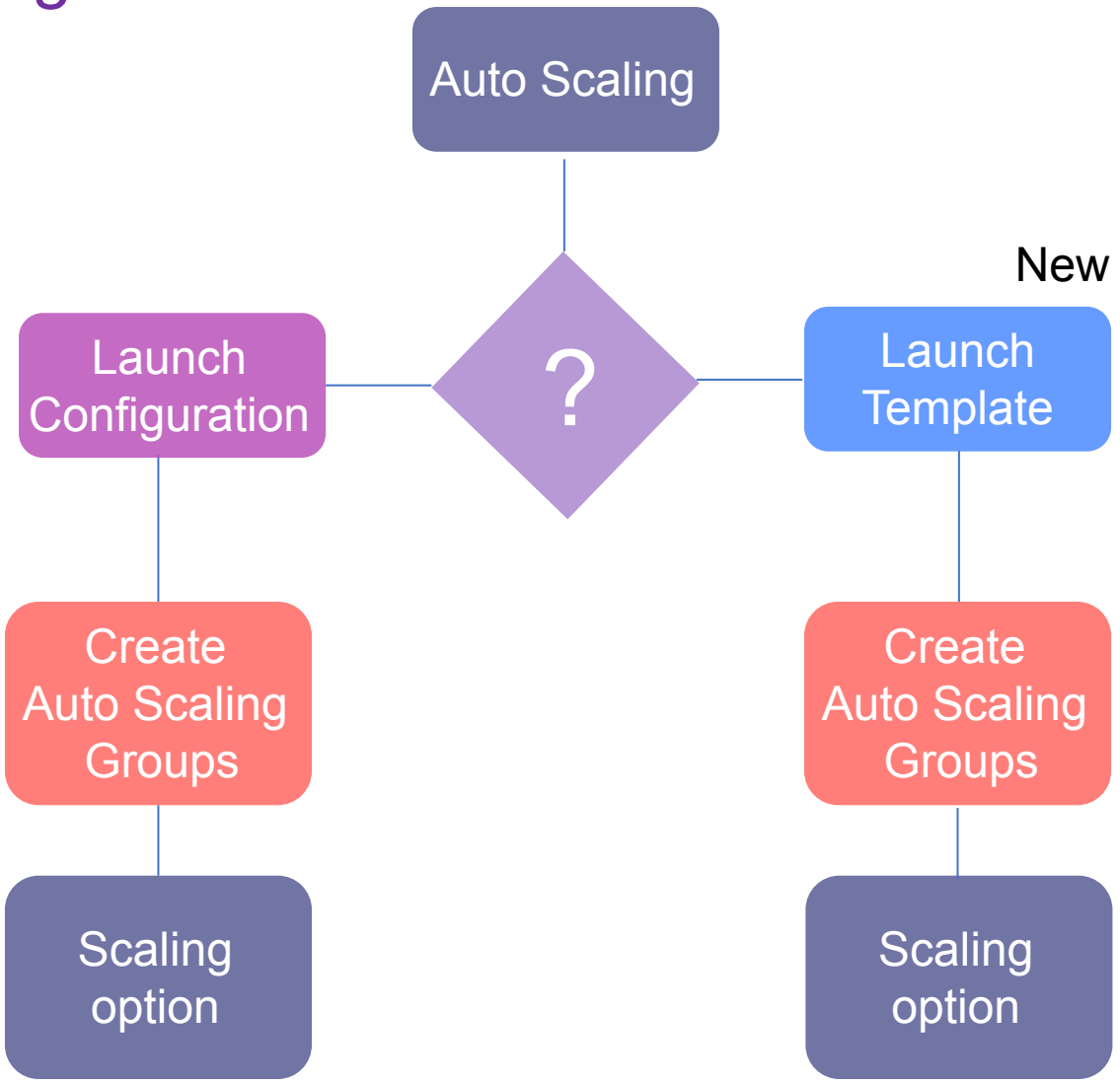
Better Cost Management



Auto Scaling

Auto Scaling Creating Process

- First, you need to select either the Launch Template or the Launch Configuration option and create it.
- Then, create an Auto Scaling Group.
- Finally, Finish Creating Auto Scaling



Auto Scaling

Launch Configuration Deprecation Schedule

The announcement from AWS

- March 31, 2023 - New accounts created after this date will not be able to create new launch configurations via the console. API and CLI access will remain available to support customers with automation use cases.

- December 31, 2023 - New accounts created after this date will not be able to create new launch configurations.

Auto Scaling

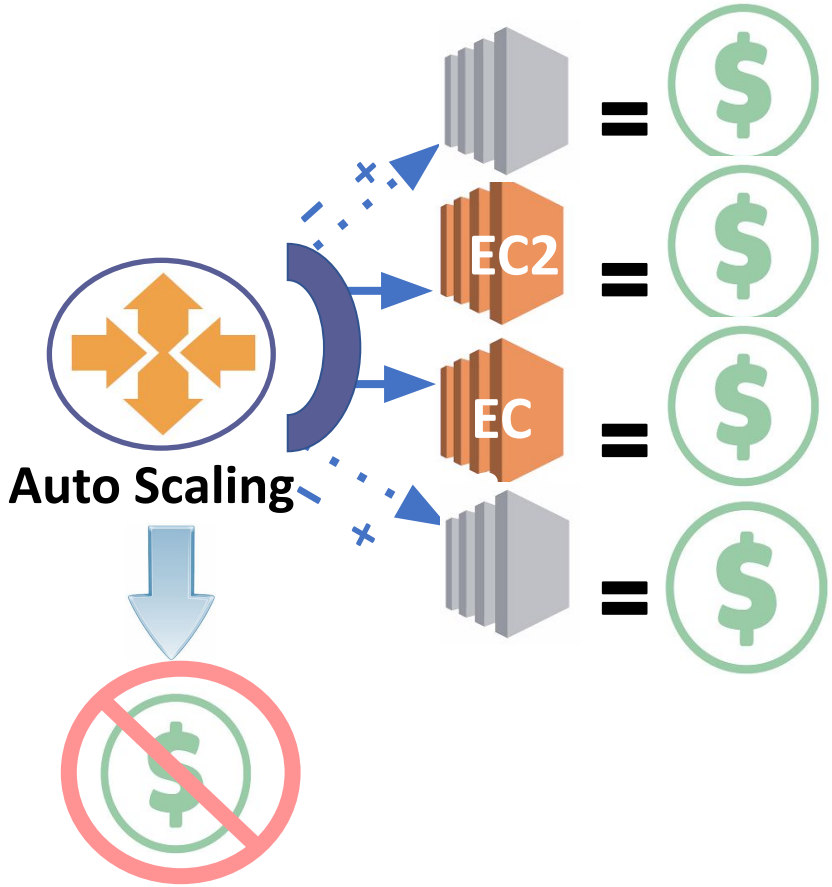
Auto Scaling Options

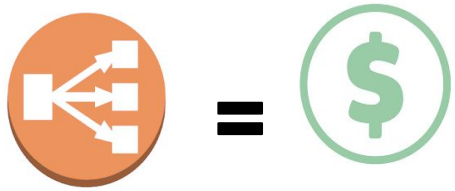
Next session

- Auto Scaling
  - Keep Initial Size
  - Dynamic Scaling
    - Target Tracking
    - Simple Scaling
    - Step Scaling
  - Scaling Policy
    - Predictive Scaling
    - Scheduled Action

Auto Scaling

Pricing for Amazon EC2 Auto Scaling





Load Balancer

Lifecycle Auto Scaling

Let's get our hands dirty!

- Creating an Auto Scaling Group

THANKS!

Any questions?