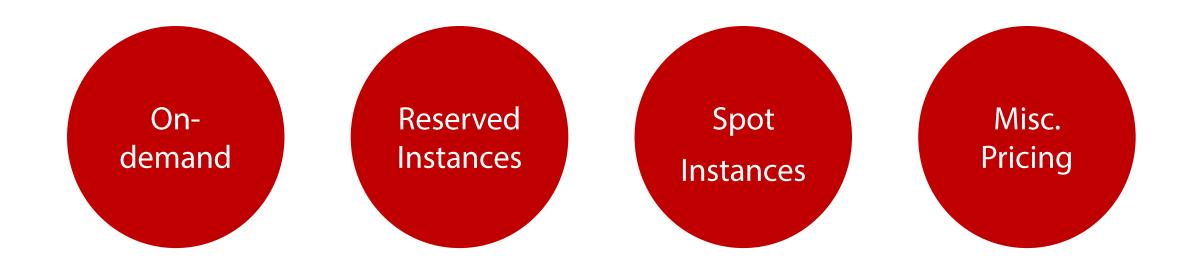
# **Understanding EC2 Pricing**



Elias Khnaser

@ekhnaser | www.eliaskhnaser.com

## EC2 Pricing



AWS EC2 Pricing:

http://aws.amazon.com/ec2/pricing/

### **On-Demand Instances**



- The default type
- The most expensive option
- No commitment
- Prices vary by AWS Region
- Billed on an hourly basis

## Reserved Instances (RI)



- Less expensive
- Requires a commitment (1 or 3 years)
- Has an upfront cost
- Lower hourly rate
- RI can be sold on the AWS Marketplace
- You commit to utilization

## Reserved Instances (RI)

| Annual<br>Utilization | Medium<br>Utilization RI | Heavy<br>Utilization RI |  |
|-----------------------|--------------------------|-------------------------|--|
| 20%                   | -32%                     | -233%                   |  |
| 40%                   | 5%                       | -66%                    |  |
| 60%                   | 17%                      | -11%                    |  |
| 80%                   | 24%                      | 17%                     |  |
| 100%                  | 27%                      | 33%                     |  |

#### Light Utilization RIs

Ideal for couple of h/day or couple days/week

#### Medium Utilization RIs

Ideal for couple of h/day or couple days/week

#### Heavy Utilization RIs

- □ Committing to running 100%
- Highest savings

# Reserved Instances (RI)

| Utilization rate | r3.xlarge on-demand | r3.xlarge 1yr medium | r3.xlarge 1yr heavy |
|------------------|---------------------|----------------------|---------------------|
| 1y (8h/d)        | \$1,786             | \$2,466              | \$3,306             |
| 1y (10h/d)       | \$2,232             | \$2,622              | \$3,306             |
| 1y (12h/d)       | \$2,678             | \$2,778              | \$3,306             |
| 1y (14h/d)       | \$3,125             | \$2,935              | \$3,306             |
| 1y (16h/d)       | \$3,571             | \$3,091              | \$3,306             |
| 1y (24h/d)       | \$5,357             | \$3,716              | \$3,306             |
| 3y (8h/d)        | \$5,357             | \$7,398              | \$7,415             |
| 3y (10h/d)       | \$6,696             | \$7,867              | \$7,415             |
| 3y (12h/d)       | \$8,035             | \$8,335              | \$7,415             |
| 3y (14h/d)       | \$9,374             | \$8,804              | \$7,415             |
| 3y (16h/d)       | \$10,714            | \$9,273              | \$7,415             |
| 3y (24h/d)       | \$16,070            | \$11,148             | \$7,415             |

## **Spot Instances**



- Unused AWS capacity
- Very cheap hourly rate
- Not guaranteed
- Based on a bid
- Ideal for raw processing power, grid-like applications
- Highly scriptable

## Summary



**On-demand Instances** 

Reserved Instances (RI)

**Spot Instances**