

DevOps Learning Notes

## DevOps Learning Notes

DevOps Learning Notes



44 views . 1 likes ♡ . 1 shares



Edwiki  
Trainings  
1 Followers

FOLLOW

Cloud Introduction

AWS Introduction

EC2 Introduction

EC2 Basics

EC2 Pricing Models

Linux Introduction

VI Editor & AWS Security Group

SSH Application

Linux Permissions

Sudo & System Log Files

Process & Performance  
Management

EBS Volume Management

EBS Snapshot - AMI & SNS

## Start Preparation Smartly

We have the collection to start  
preparation smartly.

Start Assessment

### EC2 Pricing Models

In this lecture you are learning various AWS EC2 Pricing Models:

1. EC2 Pricing Models
2. On-Demand
3. Dedicated
4. Spot Request
5. AWS Resource Tags
6. Vertical Scaling
7. AWS Health Dashboard
8. AWS What’s New

#### EC2 Pricing Models:

AWS offering various Pricing Models suits for different business demands.

1. On-Demand instances
2. Reserved Instances
3. Spot instances
4. Dedicated hosts

#### On-Demand instances:

With On-Demand Instances, you pay for compute capacity by the second with no long-term commitments. You have full control over its lifecycle—you decide when to launch, stop, hibernate, start, reboot, or terminate it.

1. You pay only for the seconds that your On-Demand Instances are in the running state, with a 60-second minimum.
2. AWS recommend that you use On-Demand Instances for applications with short-term, irregular workloads that cannot be interrupted.

#### Reserved Instance:

Reserved Instances provide you with significant savings on your Amazon EC2 costs compared to On-Demand Instance pricing

Below are the offering classes that Reserved Instance (RI) provides:

**Standard RIs** offer the best discount – up to 72% off on on-demand pricing – and is designed for applications with steady usage.

**Convertible RIs** that offer discounts of up to 54% on on-demand pricing, along with the flexibility to modify your RI attributes – for example, instance family, operating system, and tenancy. Like standard RIs, convertible RIs are suited for steady usage applications.

**Scheduled RIs** that are used to launch instances within a specific time window. This is useful when you want to utilize your available capacity to a predictable and recurring schedule that may require just a fraction of a day, week, or month.

#### Reserved Pricing:

**No Upfront:** With no upfront payment, this option offers you a discounted hourly rate - independent of the usage – for the entire 1-year or 3-year term.

**Partial Upfront:** With this option, you make a low upfront payment and then avail of a discounted hourly rate for the entire term (1-year and 3-year).

**All Upfront:** Where you pay for the entire RI term with a single upfront payment. This option offers the highest discount (up to 72%) as compared to on-demand instances.

#### Spot instances:

An AWS EC2 server is dedicated for your use. You are not billed on the basis of the numbers of instances that you have used. You purchase a dedicated host either through an hourly on-demand price or through a reservation price that is 70% cheaper than on-demand pricing.

A dedicated host is highly recommended when:

1. You need complete visibility and control over how your instances are running on your server.
2. You have applications that need to launch dedicated AWS instances on a physical server.
3. You need to deploy your application instances on the same server over an extended period of time.
4. You already have existing software licenses that need to be deployed on a physical server.

### AWS Resource Tags:

A tag is a label that you assign to an AWS resource. Each tag consists of a key and an optional value, both of which you define.

Tags enable you to categorize your AWS resources in different ways, for example, by purpose, owner, or environment. For example, you could define a set of tags for your account's Amazon EC2 instances that helps you track each instance's owner and stack level.

### Vertical Scaling:

Vertical Scaling refers adding more compute resource like CPU/RAM to the EC2 instances on demand basis. Vertical scaling describe adding more power to your EC2 instance. Vertical Scaling is also the way How to change the instance type of running, existing EC2 Instance.

### Steps to Scale UP/DOWN the EC2 Instance:

1. Stop EC2 Instance
2. Change Instance Type
3. Start EC2 Instance

**Note:** You cannot change the Instance Type to other Instance Type Family as Architecture may not be supported. So check for the compatibility before changing the Instance Type.

### AWS Health Dashboard:

The AWS Health Dashboard is the single place to learn about the availability and operations of AWS services. You can view the overall health status of AWS services and if any critical event at AWS regions, and you can sign in to view personalized communications about your particular AWS account or organization.

LINK: <https://health.aws.amazon.com/health/status>

### AWS what's New:

AWS is constantly adding new capabilities so we can leverage the latest technologies to experiment and innovate more quickly. What's new posts show how we are doing just that, providing a brief overview of all AWS service, feature, and region expansion announcements as they are released.

LINK: <https://aws.amazon.com/new/>

[Previous](#)
[Next](#)
 **Comments(0)**
