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**Module Objective**

* Designing Cloud Services
* Overview Of Amazon EC2
* Overview Of Amazon EBS
* Use case scenario

**Factors For Designing and Cloud Solutions**

* Resource (Compute,Network,Storage) should be Elastic and Scalable
* Automate the resource provision and allocation
* Focus on Services,not on servers
* Choose managed Database services
* Removing single point of failures
* Security Of infrastructure and services

**Amazon EC2**

* Resizable compute capacity
* Complete control of your computing resources
* Reduced time required to obtain and boot new server instances
* Scalable, OS options(Linux or Windows)
* Deploy across AWS regions and Availability Zones for reliability

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**Understanding The EC2 Instances**

Diagram

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**Amazon EC2 Instance Characteristics**

**Icon

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**EC2 Instance type : T2 (General Purpose)**

**Graphical user interface, application

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**EC2 Instance typev : X1 (Large Scale Memory)**

**Timeline

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**EC2 instance type : Bare Metal**

**Graphical user interface, text, application

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**Launching an Amazon EC2 instance**

Steps for launching an instance via Management Console.

* **Determine the AWS Region** in which you want to launch the Amazon EC2 instance.
* **Launch** an Amazon EC2 instance from a pre-configured AMI(**Amazon Machine Image**)
* **Choose instance type**
* **Configure** network,IP address,security groups, storage volumes, tag and key pair.

**Amazon Machine Image(AMI)**

**An AMI includes the following:**

* A template for **the root volume** for the instance (example, OS, application server)
* **Launch Permissions** that control which AWS accounts can use the AMI to launch instances
* A block device mapping that specifies **the volumes to attach to the instance** when it is launched

Diagram

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**Amazon EC2 Instances**

Graphical user interface, diagram

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**EC2 Instance LifeCycle**

Diagram

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**Amazon EC2 Purchasing options**

Timeline

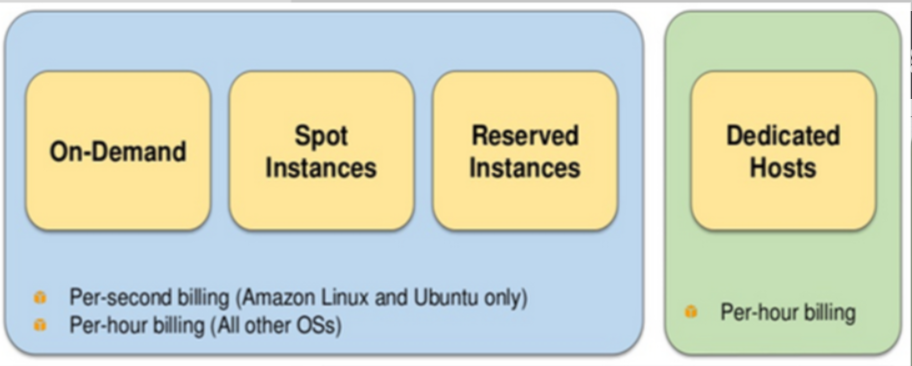
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**Amazon EC2 Pricing**

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**Launch Instances With Launch Templates**

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