SNS COLLEGE OF ENGINEERING

Kurumbapalayam (Po), Coimbatore – 641 107

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DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING(IoT and Cybersecurity Including BCT)

COURSE NAME : cloud service management

IV YEAR / VII SEMESTER

Unit II-

Topic : Cloud Cost Models

What Are Cloud Cost Models? Cloud cost models, describe the various methods that cloud providers may use to charge for their services. There are three major types of pricing providers tend to use – pay-as-you-go, reserved instances, and spot instances.

5 Cloud Cost Models

Here are several common cost models used in the cloud, which you can combine depending on your needs.

Pay-As-You-Go

- In this model, cloud services are billed per actual usage. Cloud services may bill for utilization of computing power, storage, networking, or other resources.
- The advantage is that you only pay for actual usage, and can scale down resources when needed. The downside is that as you add more resources to your cloud deployment, ongoing costs can quickly skyrocket.

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Prepaid/Fixed Subscriptions

- In a subscription-based model, cloud customers pay for services upfront. Subscription prices deliver a predetermined package of services for a specified time. The longer the period, the lower the price.
- Subscription pricing is common for cloud services that combine multiple hardware and software elements, like platform as a service (PaaS) and software as a service (SaaS).
- Most cloud providers also offer subscription-based pricing for customers with high spend, allowing them to enter into a corporate discount plan, where they commit to a certain level of cloud spend and receive a discount on some or all of their cloud services

Reserved Instances

- Reserved instances allow companies to commit to cloud resources for a long period of time, typically 1 or 3 years.
- The longer the discount, and the more the company is prepared to pre-pay at the beginning of the period, the greater the discount.
- A three-year term is usually the most cost effective.
- Cloud providers typically offer discounts of 50-75% compared to pay-as-you-go rates for reserved instances with the same capabilities.

AWS Savings Plan

Similar to reserved instances, Savings Plans are a flexible pricing model that allows organizations to enjoy lower than on-demand pricing, in exchange for a one-year or three-year specific usage commitment. The commitment is expressed in terms of spend per hour on Amazon services.

AWS offers three types of Savings Plans:

Compute Savings Plans – apply to all usage of Amazon compute services usage, including EC2, AWS Lambda and Fargate.
EC2 Savings Plans – applies only to usage of Amazon EC2 instances.
SageMaker Savings Plans – applies only to SageMaker usage.

Savings plan offer three payment methods:

No upfront – does not require an upfront payment, bills customers according to actual usage each month. This grants the minimal savings plan discount.
Partial upfront payment – with this option, more than half of your contract is prepaid and the rest is billed monthly, which grants an additional discount.
Full upfront payment – the full commitment is paid upfront, which grants the deepest discount.

Spot Instances

Spot instances are usually the lowest-cost computing option, offering discounts of up to 90% compared to pay-as-you-go rates. Spot instances are used by cloud providers to sell off spare capacity. The discount comes with a catch—spot instances can be interrupted at very short notice.