Safe Harbor Statement

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Agenda

Cloud Computing
Service Models
Cloud Terminology
CAPEX v/s OPEX
Cloud Computing

On-demand self-service
Provision computing capabilities as needed automatically without requiring human interaction with service provider

Rapid elasticity
Capabilities can be elastically provisioned and released, in some cases automatically, to scale rapidly outward and inward with demand

Broad network access
Capabilities are available over the network and accessed through standard mechanisms

Measured service
Resource usage can be monitored, controlled, and reported, providing transparency for both the provider and consumer of the utilized service

Resource pooling
The provider’s computing resources are pooled to serve multiple consumers using a multi-tenant model, with different resources dynamically assigned and reassigned according to demand

Service Models

Traditional IT
- Applications
- Data
- Runtime
- Middleware
- Operating System
- Virtualization
- Servers
- Storage
- Networking

You Manage

Infrastructure-as-a-service (IaaS)
- Applications
- Data
- Runtime
- Middleware
- Operating System
- Virtualization
- Servers
- Storage
- Networking

Delivered as-a-service

Platform-as-a-service (PaaS)
- Applications
- Data
- Runtime
- Middleware
- Operating System
- Virtualization
- Servers
- Storage
- Networking

Delivered as-a-service

Software-as-a-service (SaaS)
- Applications
- Data
- Runtime
- Middleware
- Operating System
- Virtualization
- Servers
- Storage
- Networking

Delivered as-a-service
High Availability

- Computing environments configured to provide nearly full-time availability are known as high availability systems.

- Such systems typically have redundant hardware and software that makes the system available despite failures.

- Well-designed high availability systems avoid having single points-of-failure.

- When failures occur, the failover process moves processing performed by the failed component to the backup component. The more transparent that failover is to users, the higher the availability of the system.
Disaster Recovery

- Disaster recovery (DR) involves a set of policies, tools and procedures to enable the recovery or continuation of vital technology infrastructure and systems.

- Disaster recovery should indicate the key metrics of recovery point objective (RPO) and recovery time objective (RTO).
Cloud Terminology

- **Fault Tolerance** describes how a cloud vendor will ensure minimal downtime for services provided.

- **Scalability** refers to scaling out (or in) or scaling up (or down).
  - Scaling out (or in) is called horizontal scaling.
  - Scaling up (or down) is called vertical scaling.

- **Elasticity** is the ability to quickly increase or decrease resources.
CAPEX v/s OPEX

CAPEX
Capital expenditure or capital expense (CAPEX) is the money an organization or corporate entity spends to buy, maintain, or improve its fixed assets, such as buildings, vehicles, equipment, or land.

OPEX
Operational expenditure or OPEX is an ongoing cost for running a product, business, or system.

Cloud lets you trade CAPEX for OPEX
Instead of having to invest heavily in data centers and infrastructure, in the cloud, you can pay only when you consume resources, and pay only for how much you consume.
Summary

Cloud Computing – on-demand self-service, network access, resource pooling, rapid elasticity, measure service
Service Models – IaaS, PaaS, SaaS
Cloud Terminology – HA, DR, Fault Tolerance, Scalability, Elasticity
CAPEX v/s OPEX
Oracle Cloud always free tier: oracle.com/cloud/free/

OCI training and certification: cloud.oracle.com/en_US/iaas/training
cloud.oracle.com/en_US/iaas/training/certification
education.oracle.com/oracle-certification-path/pFamily_647

OCI hands-on labs: ocitraining.qloudable.com/provider/oracle

Oracle learning library videos on YouTube: youtube.com/user/OracleLearning
Thank you