

Features :

Scalable : resource can be allocated dynamically based on demand.

Cost effective : eliminate needs of physical HW investment.

Flexibility : Supports various OS applications & development environments.

Security : Cloud provides built in security measures such as encryption, firewall & access control.

Exp: AWS EC2 → Elastic Cloud Compute for scalable VMs.

Microsoft Azure VM → provides windows & linux based instances.

IBM Cloud Infrastructure : flexible cloud with AI powered automation.

Oracle Cloud Infrastructure : high performance computing & enterprise db management.

IaaS

→ 3 layered architecture.

(A) Compute Layer:

- Hosts VM to run appⁿ & workloads.

Uses hypervisor to manage VM execution.
ensuring resource optimization.

Supports auto scaling & ~~resource optimization~~
load balancing to dynamically adjust
computing power based on demand.

Provides GPU enabled instances for high
performing computing & for AI/ML

(B) Storage Layer:

- Provides scalable storage sol.ⁿ
including object storage, block st. file st.
- Ensures data redundancy through automated
replication, minimizing risk of data loss.
- Offers high availability & disaster
recovery features.