

IaaS-Infrastructure as a Service





Infrastructure-as-a-Service (IaaS)

is a form of cloud computing that delivers fundamental:

compute

network

storage

to consumers on-demand, over the internet, on a pay-as-you-go basis.

The cloud provider hosts the infrastructure components traditionally present in an on-premises data center as well as the virtualization or hypervisor layer.



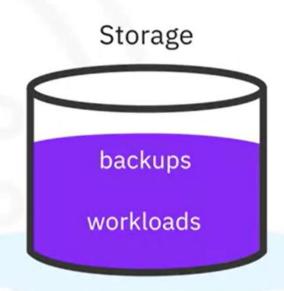
IaaS Cloud

Virtual Machines (VMs)

data applications middleware

OS OS

Hypervisor



The ability to **track and monitor** the performance and usage of their cloud services and manage **disaster recovery**.





(A) Physical data centers

(B) Compute

(C) Network

(D) Storage

physical machines

Iaas

End users do not interact directly with the physical infrastructure but experience it as a service provided to them.



(A) Physical data centers

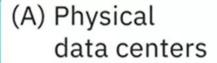
(B) Compute

(C) Network

(D) Storage



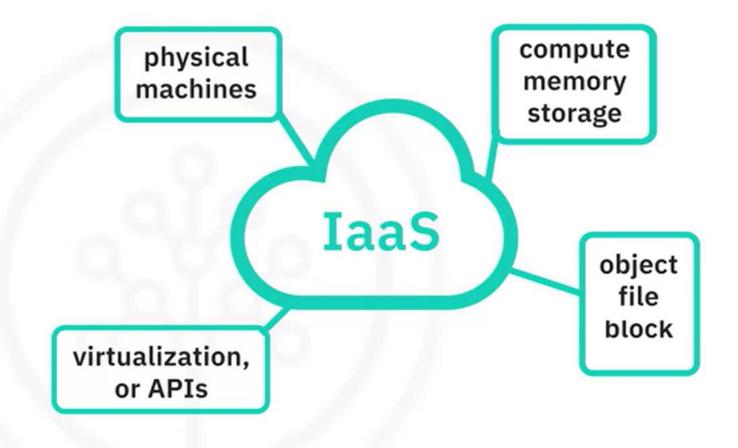
Comes with supporting services like auto scaling and load balancing that provide scalability and high performance.



(B) Compute

(C) Network

(D) Storage



Object storage is the most common mode of storage in the cloud, given that it is highly distributed and



Test and Development

Enable their teams to set up test and development environments faster.

Helping developers focus more on business logic than infrastructure management.





Business Continuity and Disaster Recovery

Require a significant amount of technology and staff investments.

Make applications and data accessible as usual during a disaster or outage.





Faster Deployments and Scaling

To deploy their web applications faster.

Scale infrastructure up and down as demand fluctuates.





High Performance Computing

To solve complex problems involving millions of variables and calculations.





Big Data Analysis

Patterns, trends, and associations requires a huge amount of processing power.

Provides the required high-performance computing but also makes it economically viable.





IaaS Concerns



lack of transparency



dependency on a third party

