

# AZ-900 Microsoft Azure Fundamentals

## Cloud Computing

Cloud computing is the delivery of computing services over the internet. Computing services include common IT infrastructure such as virtual machines, storage, databases, and networking.



File Storage



Databases



Networking



Virtual Machines  
(Compute Power)



Analytics

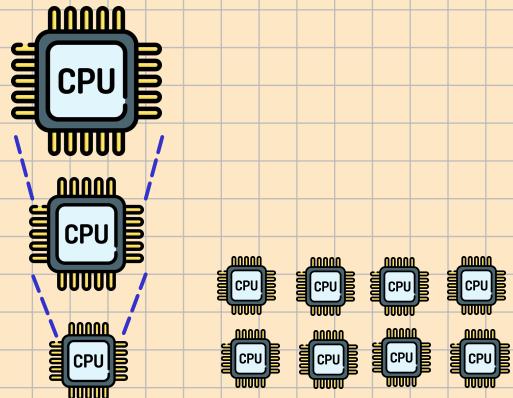
Cloud computing uses the internet to deliver these services, it doesn't have to be constrained by physical infrastructure the same way that a traditional datacenter is. If you need to increase your IT infrastructure rapidly, you don't have to wait to build a new datacenter—you can use the cloud to rapidly expand your IT footprint.

# Key Characteristics

## Scalability

Scalability is the ability to scale.

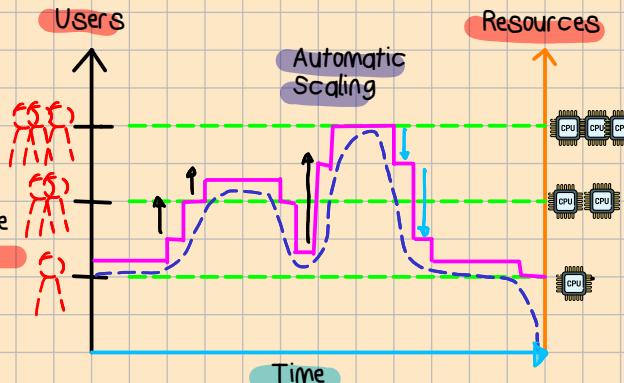
Scaling is a process of allocating (adding) resources or deallocating (removing) resources



## Elasticity

Elasticity is the ability to scale dynamically

Elasticity takes place when the loads on your resources increases or decreases in different time of the day and system able to allocate or deallocate resources according to the demand



## Agility

Agility is the ability to react as quickly as possible

in cloud computing agility is the ability to allocate and deallocate resources quickly

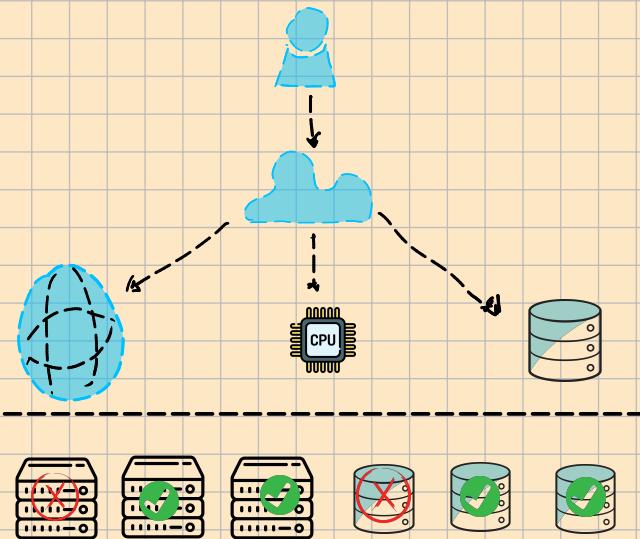
## cloud on-premises

seconds  
minutes  
hours

days  
weeks  
months

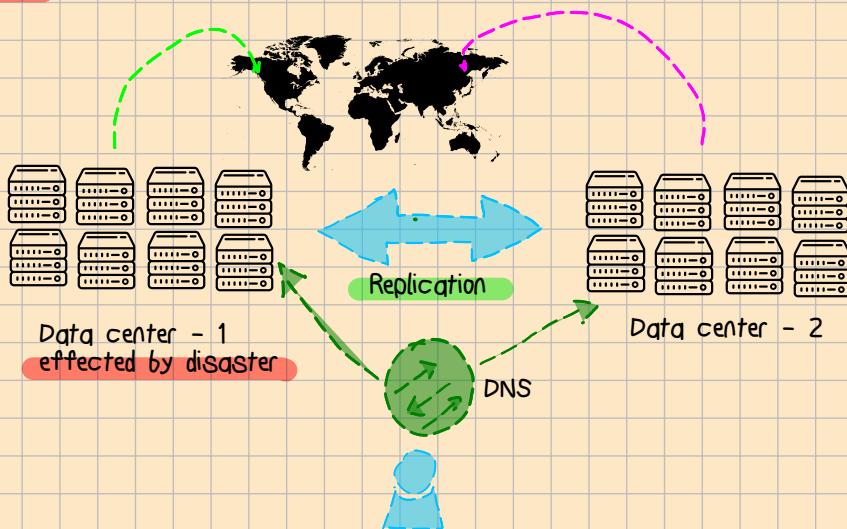
## Fault Tolerance

Fault tolerance is the ability to remain up and running during component and service failures.



## Disaster Recovery

Disaster Recovery takes place after a disaster which is a serious disruption of services caused by natural or human-induced causes.



Disaster Recovery is the ability to recover from an event that has been taken the service.

## High Availability

High Availability is the ability to keep services running for extended periods of time with very little downtime.

