Multi-AZ:

Multi-AZ stands for Multiple Availability Zones

- Also known as High Availability

Availability Zone

- An isolated, distinct data center in the same region
- Connected via a low-latency link

Multi-AZ provides an **enterprise grade, fault tolerant solution.**

- Leverages another Availability Zone for a secondary host
- Primary host is replicated to a secondary host.

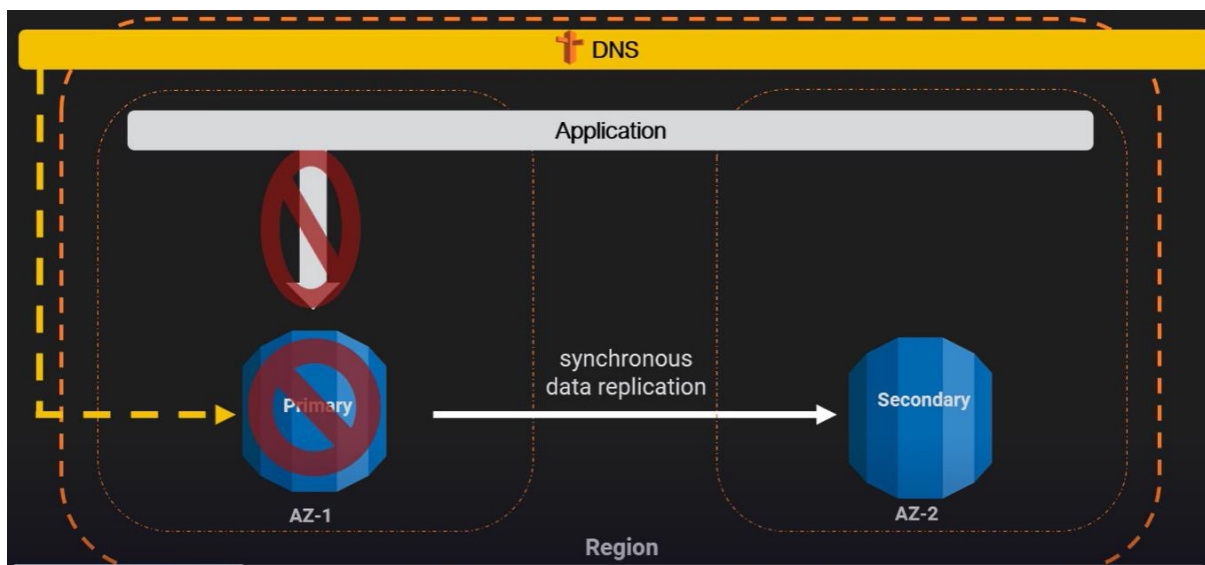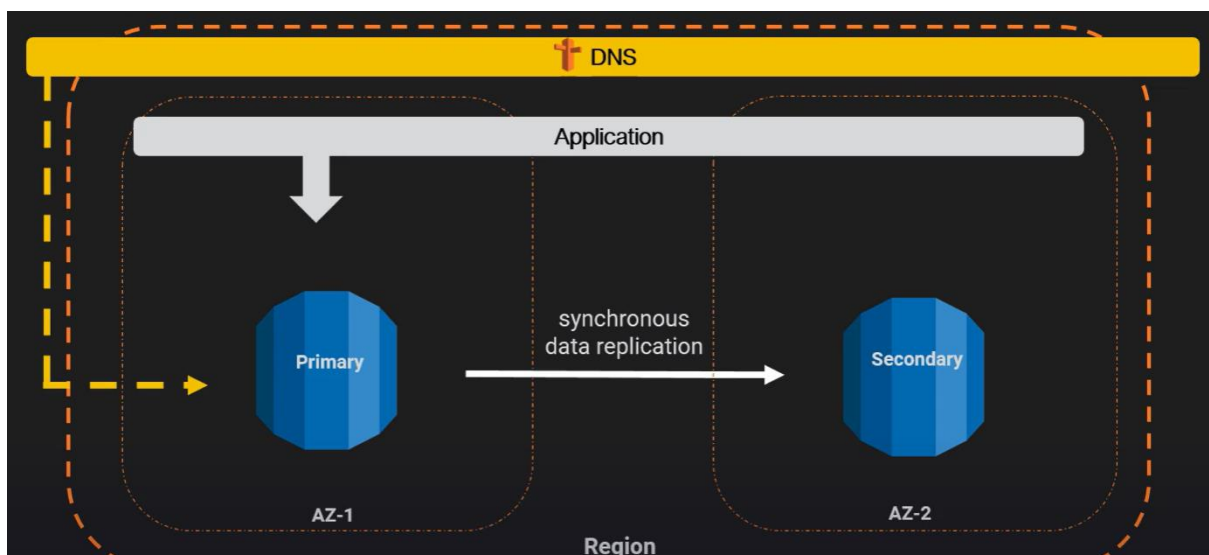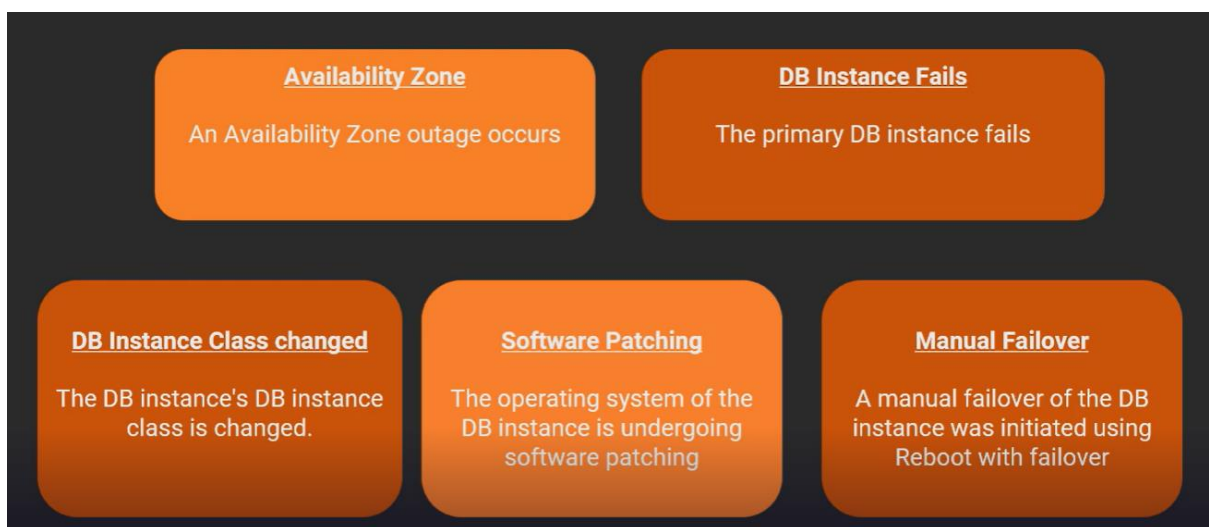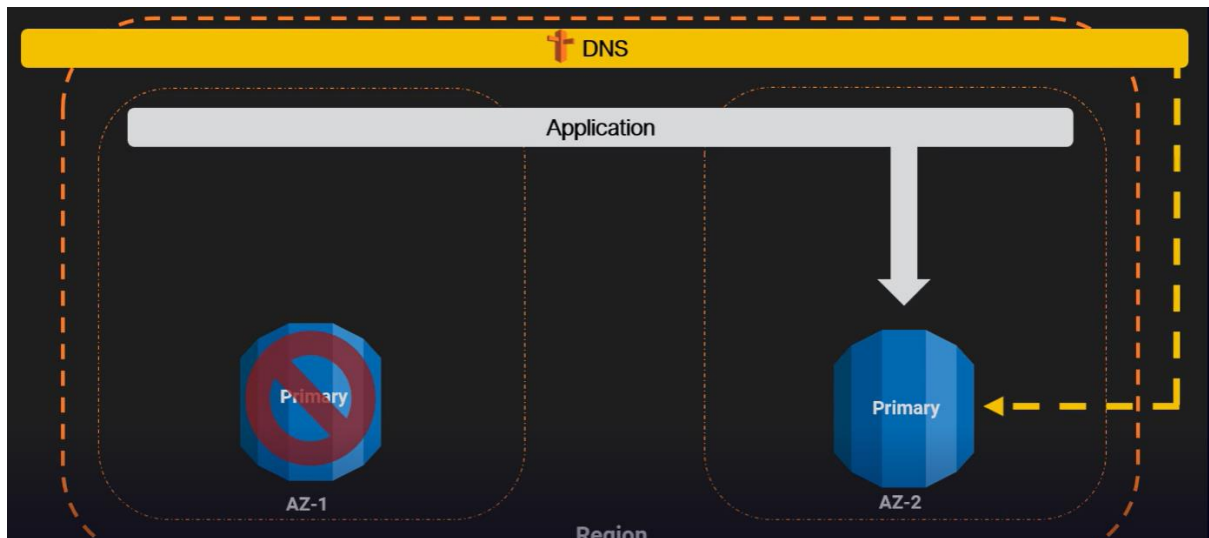Secondary host will not improve the performance of your Database Instance.

- Secondary host does **not** handle active write traffic.
- Used for failover scenarios
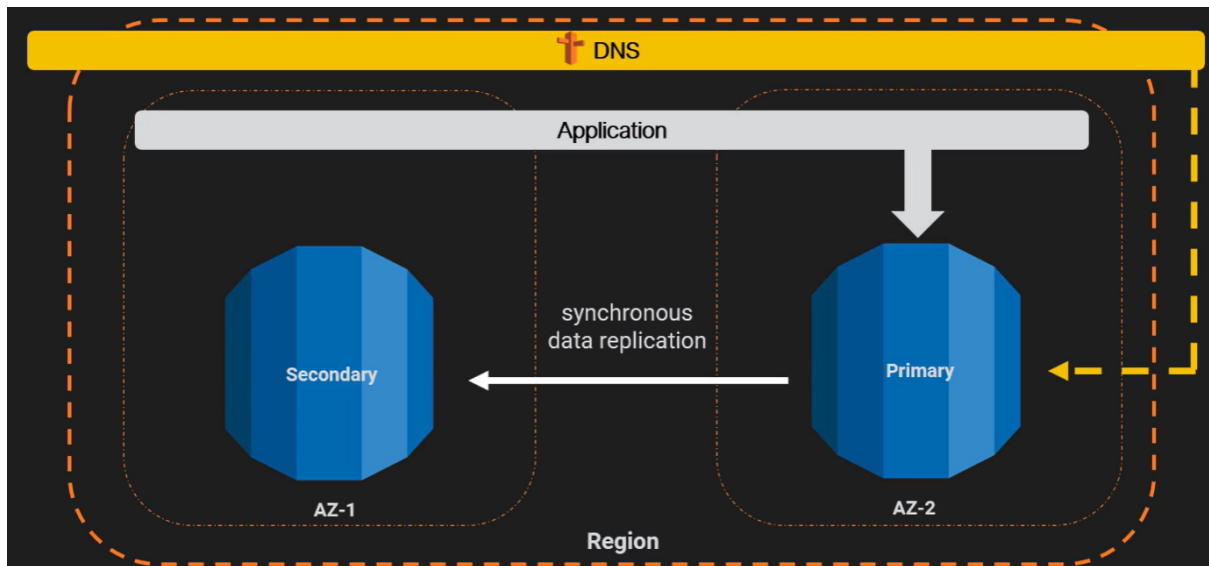- Writes to a Multi-AZ Database Instance are slightly slower

Twice the cost of Single AZ configuration

Improves Backups

Next lesson

DNS

Application

Primary — AZ-1

Primary — AZ-2

Region

Availability Zone

An Availability Zone outage occurs

DB Instance Fails

The primary DB instance fails

DB Instance Class changed

The DB instance's DB instance class is changed.

Software Patching

The operating system of the DB instance is undergoing software patching

Manual Failover

A manual failover of the DB instance was initiated using Reboot with failover

DNS

Application

Primary — AZ-1

synchronous data replication

Secondary — AZ-2

Region

Failover takes between 1 – 2 minutes typically:

- Additional time to start new hosts for secondary

Beware of DNS caching:

- Time to Live properties should be respected.
- Best to test your application
- Reboot with failover option in Console