* Other Complimentory Servers *

There is 5 common servers types

(1) Everything on servers
(2) Seperate data base Servers
(3) Load Balancers
(4) HTTP Accelerators
(5) Primary-replica Database Replication
Combining Concepts

(1) in this everything on servers so database and pages
- fights for same resource so it will reduce performance (cpu, IO, database)
- Adv = simple setup
- disAdv = Not scalable, Performance due to sharing resource.

(2) Seperate database
- In this there is seperate database and pages so A will be faster then previous.
- Adv = faster, Vertically scale time seperately, incro security
- disAdv = more complex, Performance issue if both servers have low bandwidth or latency.

(3) Load blancers
- In this there is 2 servers for nearest so it will be echo friendly for user.
Dig :- (user) — (Load ballancers) — (app Backend) (app backend) — (database)
- Adv = horizontal Scaling, Prevention from DDoS atk
- disAdv :- Bottleneck if not have inny resource, Poor configuration
  - Removing SSL connection can harm security
  - Single point solve if Load blancers gose down then full servers goes down

(4) HTTP Accelerators
- there is one Accelerators that store freqent we data to speed the nearest response. (this use caching technique)

Pros - increase site Performance reduce cpu load.
- can be used as reverse Proxy
- some caching servers Provide DDoS resistance.

Cons - Require tuning to get Good Performance
- cache-hit is low.

(5) Primary replication
Reading improvement because of two servers Primary server take update and other replica servers follow that copy.

Pro :- Read speed.

Con :- outdated data can occure
- Primary servers fail then no update operation can Perform
- Setup is complicated

(6) combine concept
in this there is replication of servers on same level so one fail then there is another to give response

Pro - Read speed, Availibility

Con - If servers fails then request gose into loop the other Some time it will return to the user. when one of servers goses back online.