Active-Active / Active-Stand-by Architectural Pattern

Active-Active / Active-Stand-by architectural patterns are commonly used when we consider fail-over in server deployment design.

Active-Active

Following is the simple example for your better understanding of Active-Active Architecture.

Gliffy Macro Error

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You may have some question how to assign job at Load Balancer above. There will be following different approaches

- Round Robin (sometimes called "Next in Loop")
- Weighted Round Robin as Round Robin, but some servers get a larger share of the overall traffic
- Random
- Source IP hash if someone try DDoS attack from a same source IP, only the hashed server will be damaged
- URL hash
- Least connections, weighted least connections
- Least traffic
- Least latency

Active-Stand-by

This approach is super simple, but little bit wasting resources, so I usually don't like. By the way, Active-Stand-by is commonly used to build DR(Disaster Recovery) Center.

When you see, there are two different entities - one for Active, and the other for Stand-by. Stand-by means it does not work at all as long as Active has no problem.

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