

Deployment strategy:

Rolling Updates (Zero Downtime Deployment)

Process:

- Update one instance of a service at a time (e.g., UserService, PostService).
- Once one instance has been updated and is healthy, update the next instance, ensuring there is always at least one instance of each service available to handle traffic.

Advantages:

- Ensures that there is always a version of the service running and capable of serving traffic, preventing any downtime.
- Allows for gradual updates across multiple instances of a service.

Implementation:

- Using docker-compose up --scale to incrementally add or update containers.
- API Gateway can handle the routing to available instances during the update process.