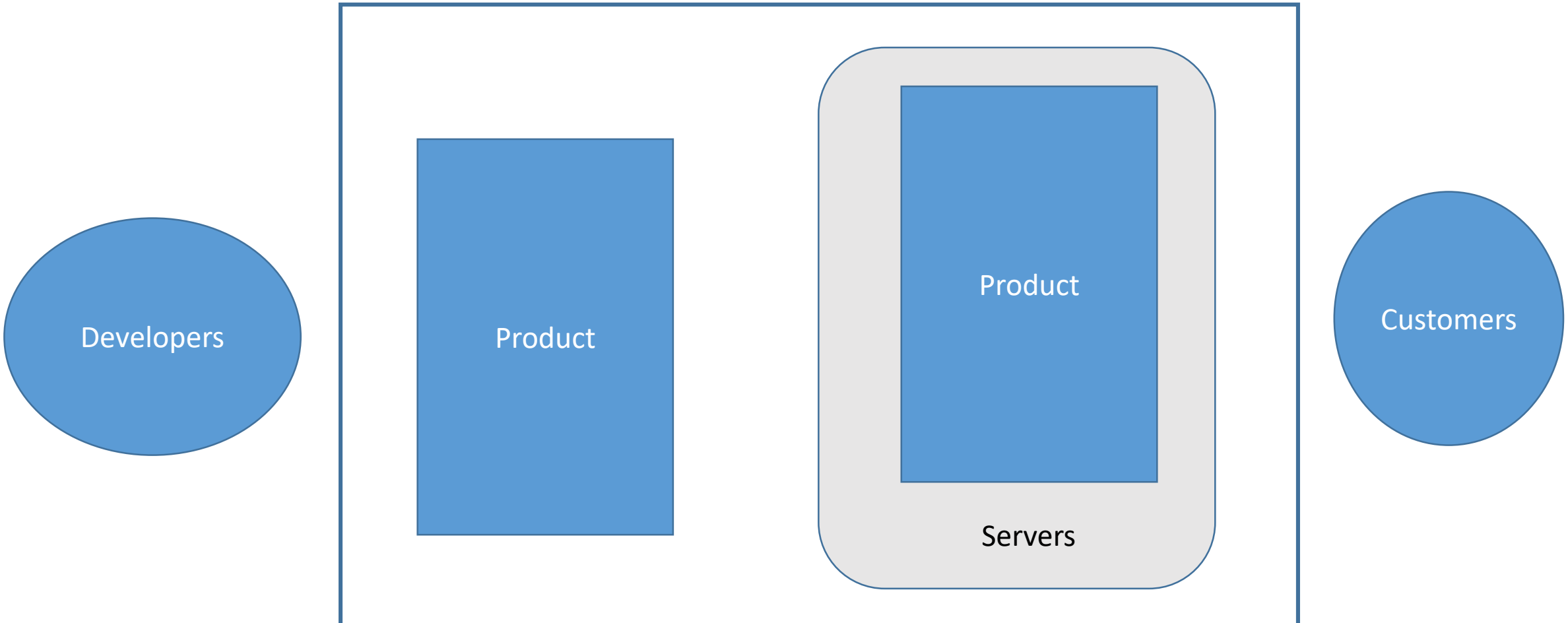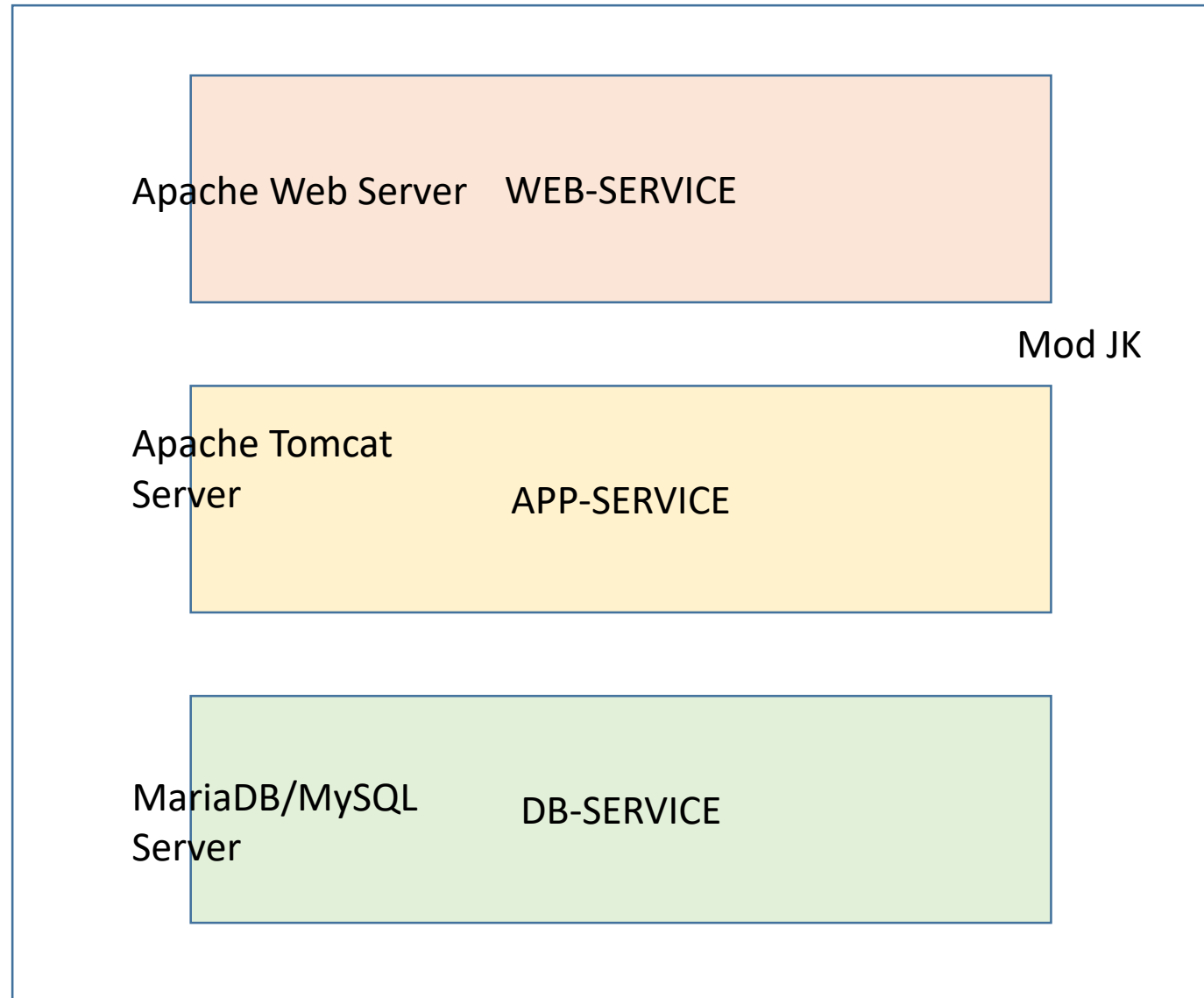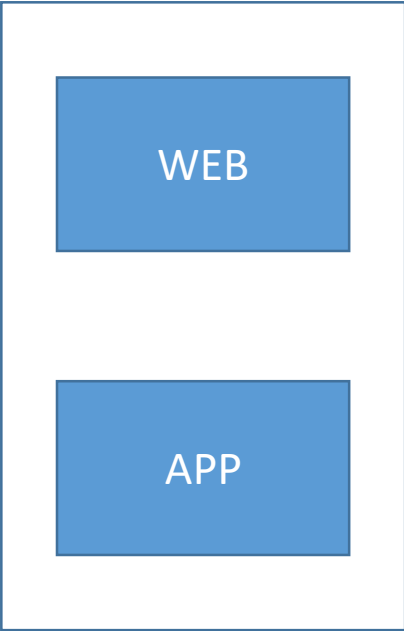Roles and Responsibilities of DevOps:
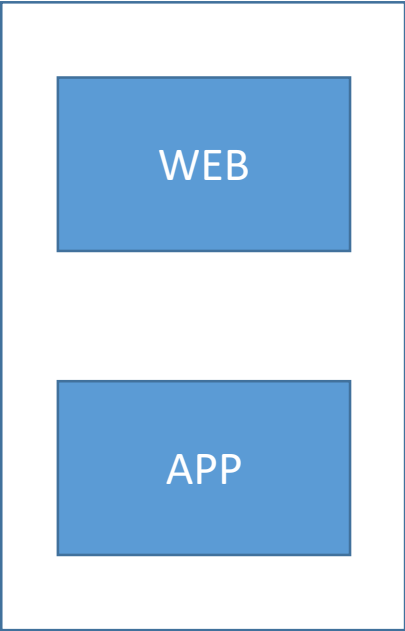
1. Ensuring the application CI/CD (Delivering the code to PROD) process happens in an automated way without any issues.

2. Infrastructure which that application is using is also maintained and ensuring 99.9% uptime to those environments.

3-Tier Architecture

Apache Web Server   WEB-SERVICE

Mod JK

Apache Tomcat
Server   APP-SERVICE

MariaDB/MySQL   DB-SERVICE
Server

```
┌─────────────────────────────────┐
│          Load Balancer          │
└─────────────────────────────────┘


┌──────────────────┐      ┌──────────────────┐
│  ┌───────────┐   │      │  ┌───────────┐   │
│  │    WEB    │   │      │  │    WEB    │   │
│  └───────────┘   │      │  └───────────┘   │
│                  │      │                  │
│  ┌───────────┐   │      │  ┌───────────┐   │
│  │    APP    │   │      │  │    APP    │   │
│  └───────────┘   │      │  └───────────┘   │
└──────────────────┘      └──────────────────┘


        ┌───────────────────────────┐
        │         DB Server         │
        └───────────────────────────┘
```

Load Balancer (Web Server)

Load Balancer (Haproxy)
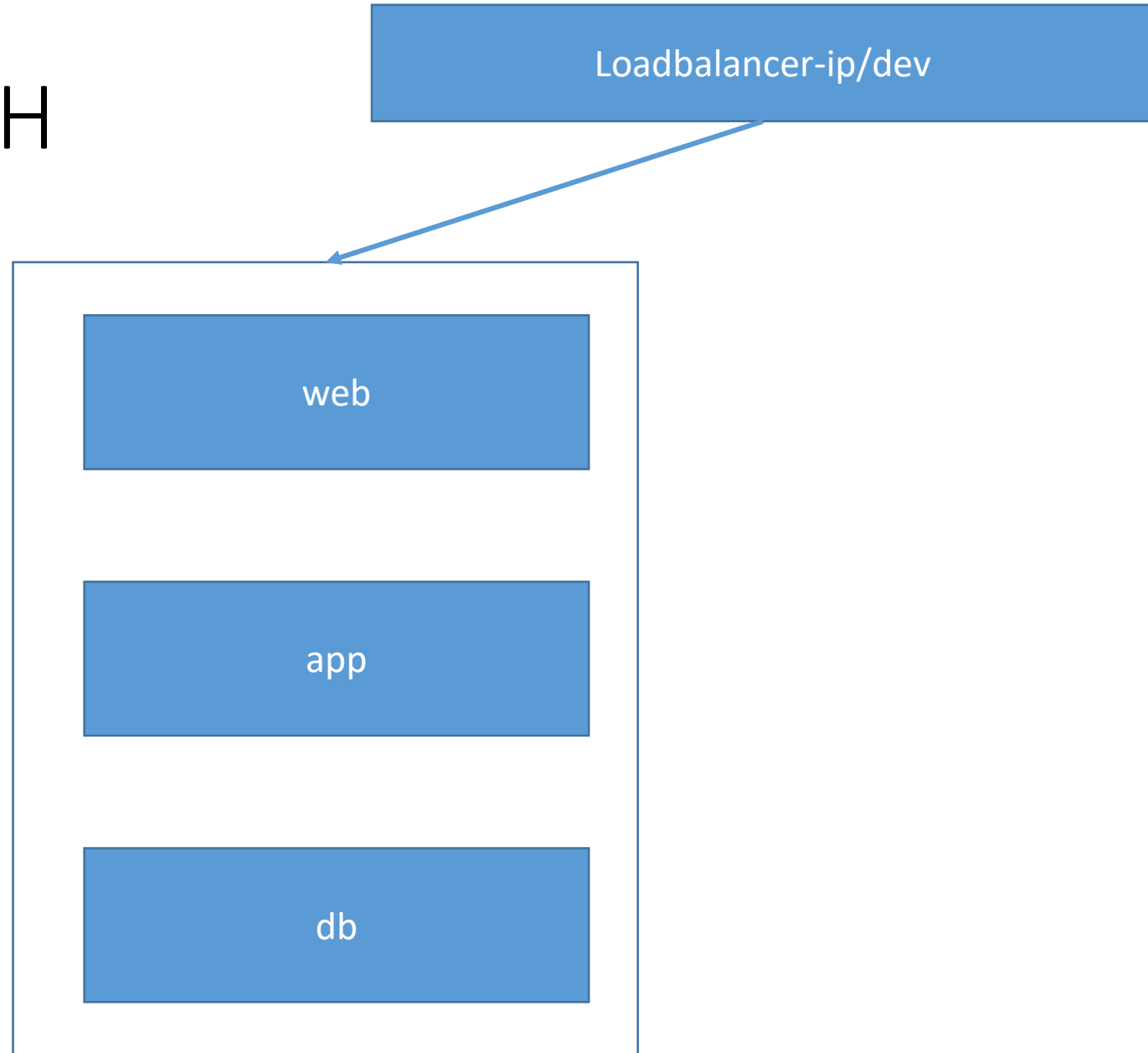
DEV
Environment

Web/app/db

QA/PERF
Environment

Web/app/db

Pre-Prod/
Staging/
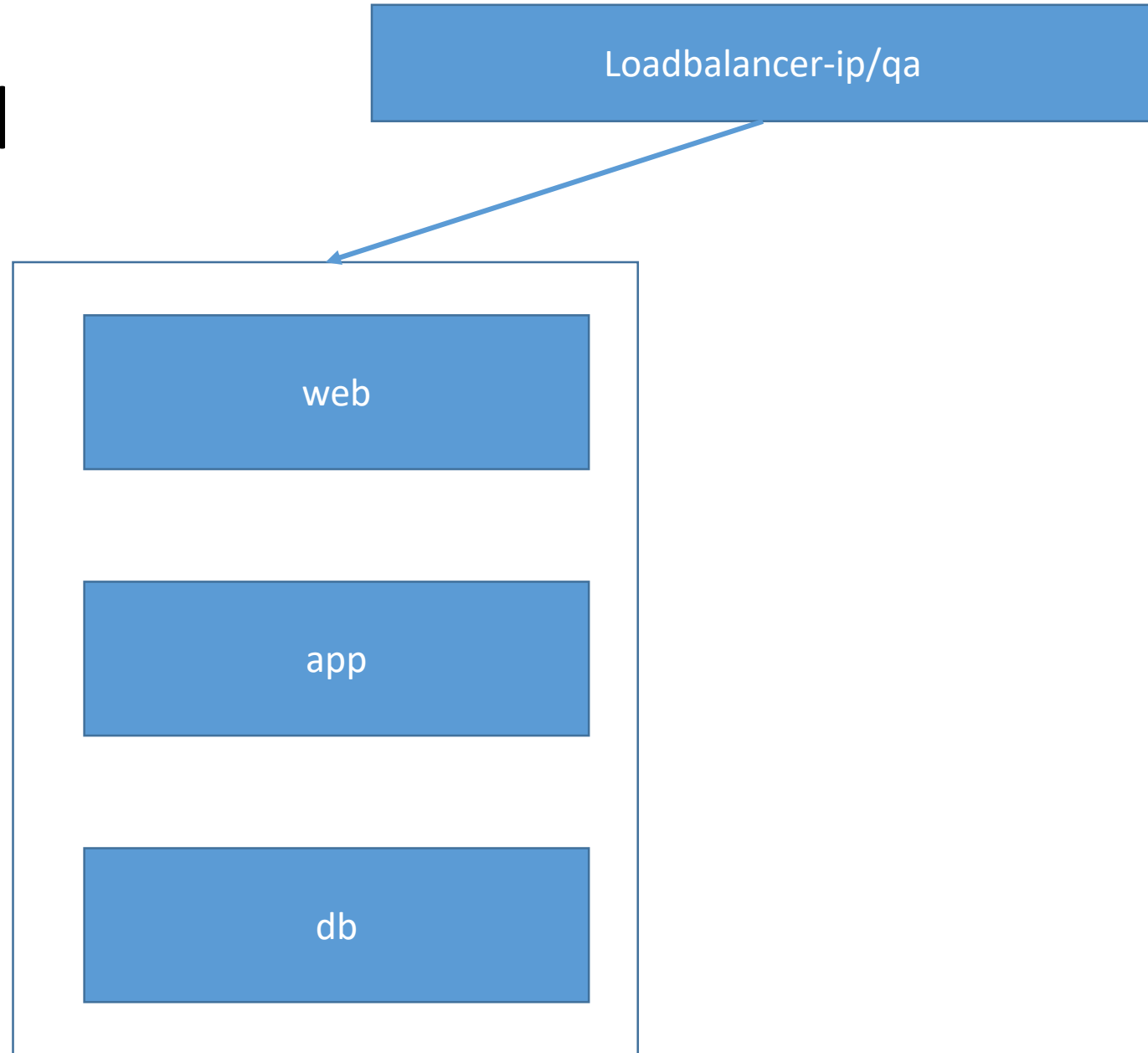Sandbox/
UAT
Environment

Web/app
DB
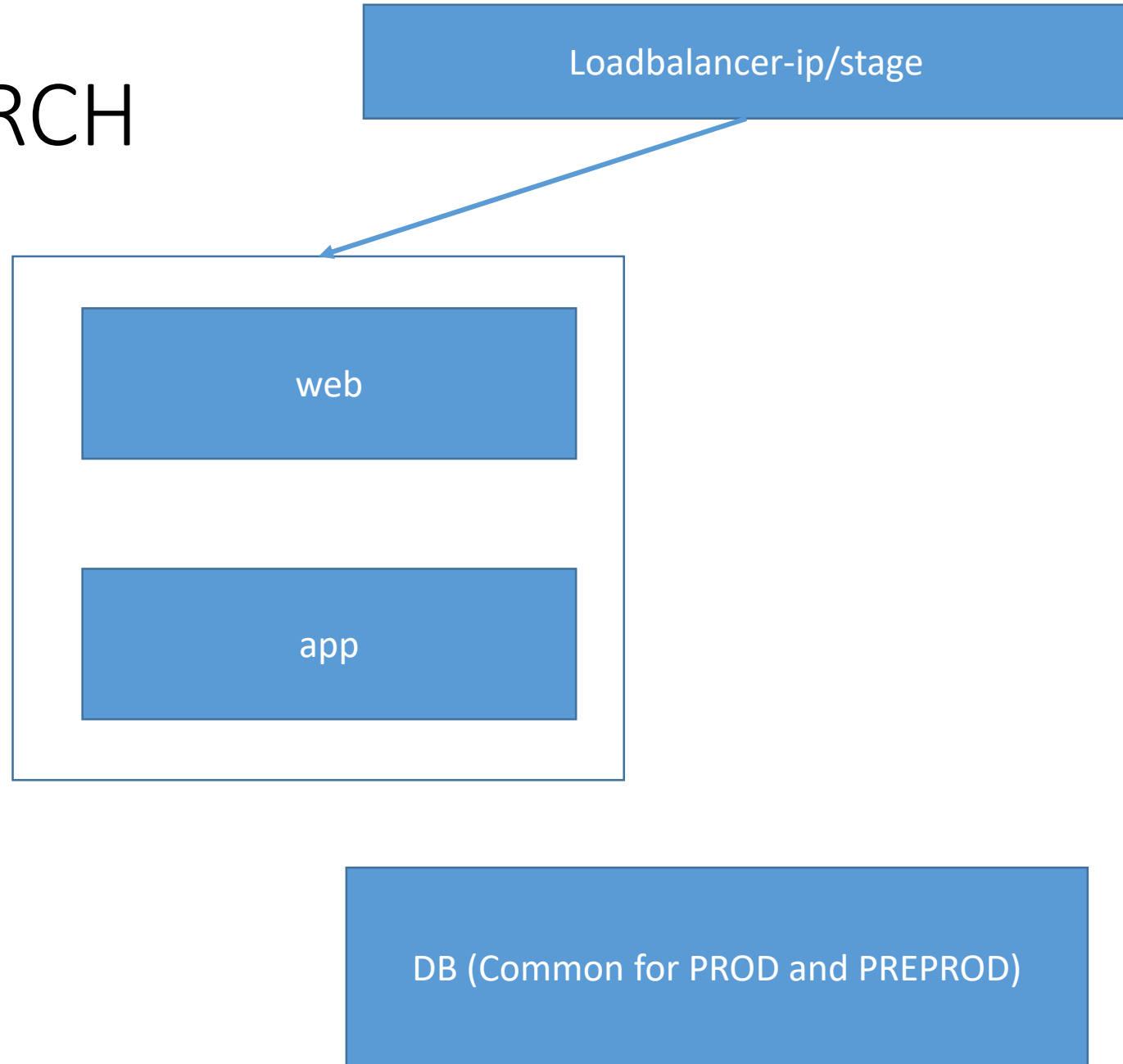
Pre-Prod/
Staging/
Sandbox/
UAT
Environment

Web/app
DB

DEV ENV ARCH

Loadbalancer-ip/dev

web

app

db

QA ENV ARCH

Loadbalancer-ip/qa

web

app

db

STAGE ENV ARCH

Loadbalancer-ip/stage

web

app

DB (Common for PROD and PREPROD)

PROD ENV ARCH

Loadbalancer-ip/
Loadbalancer-ip/prod

Load Balancer (haproxy)

web

app

web

app

DB (Common for PROD and PREPROD)