

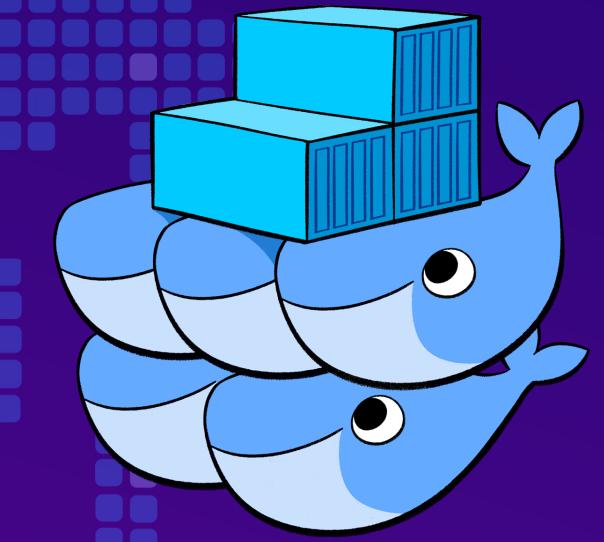


LIVE

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EP.3 Scalability with Docker and Docker Swarm Mode





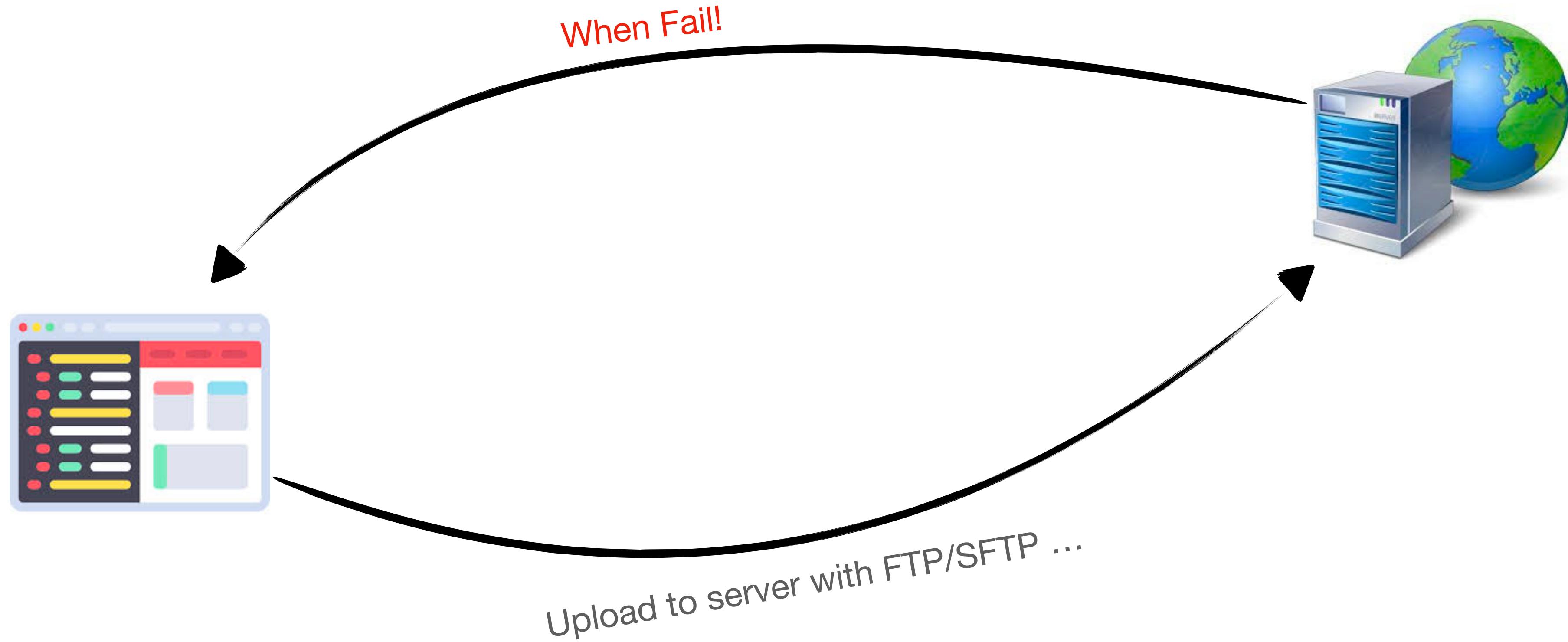
Apinan Woratrakun

CEO - iOTech Enterprise

หัวข้อวันนี้

- What is docker swarm mode
- Setup swarm node cluster
- Up and run service
- Manage and scale

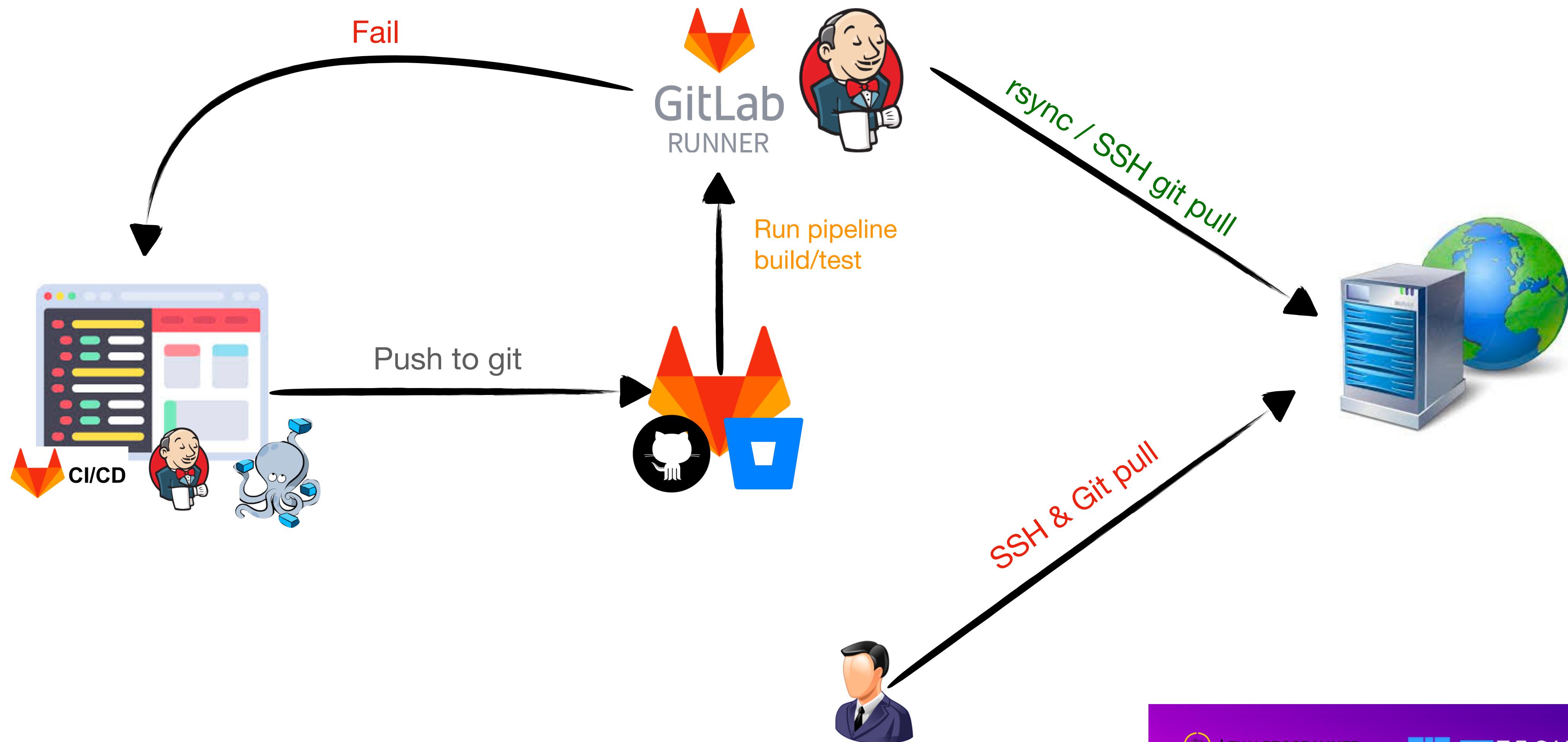
Old school !!!



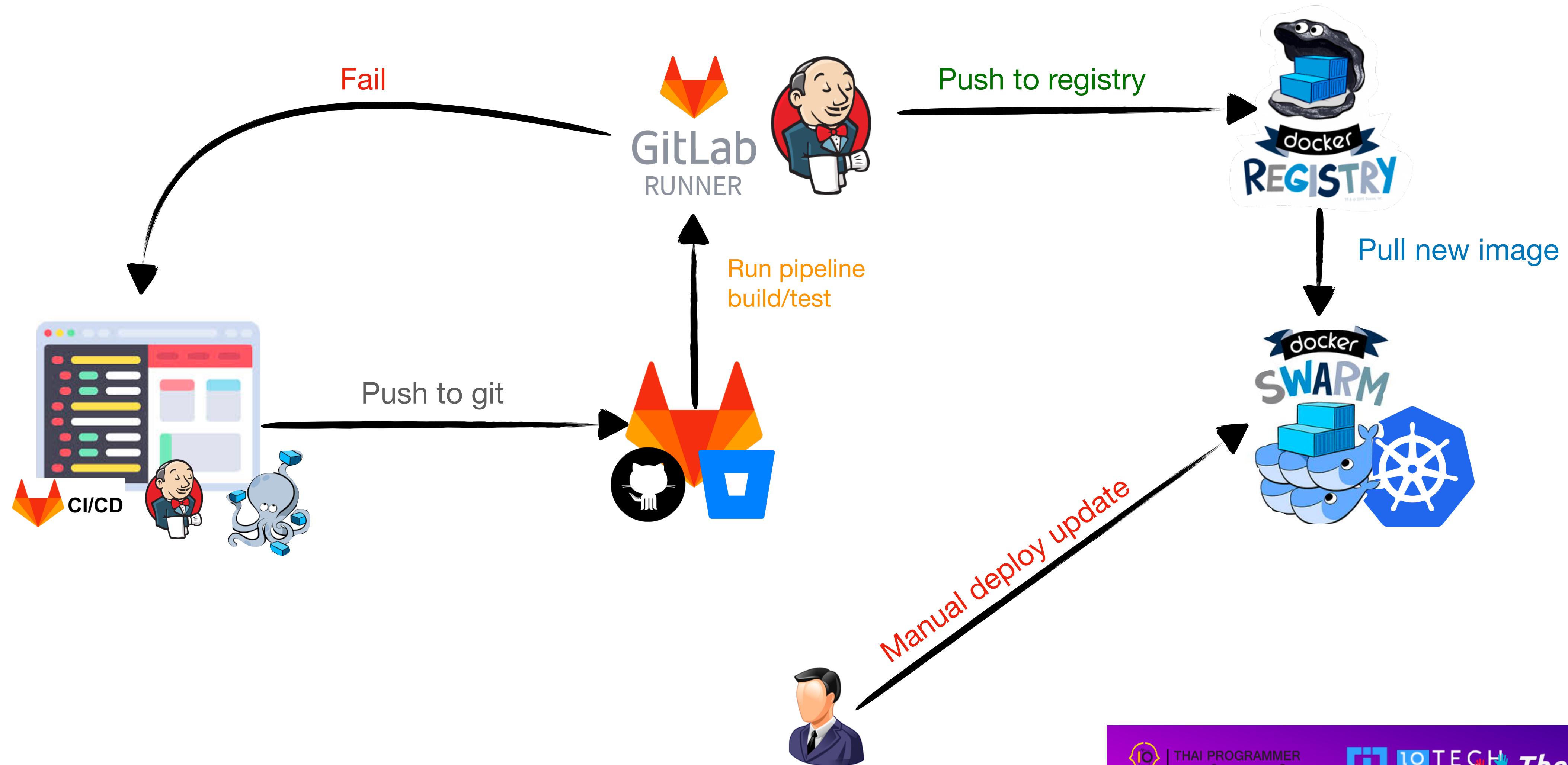
Old school !!!



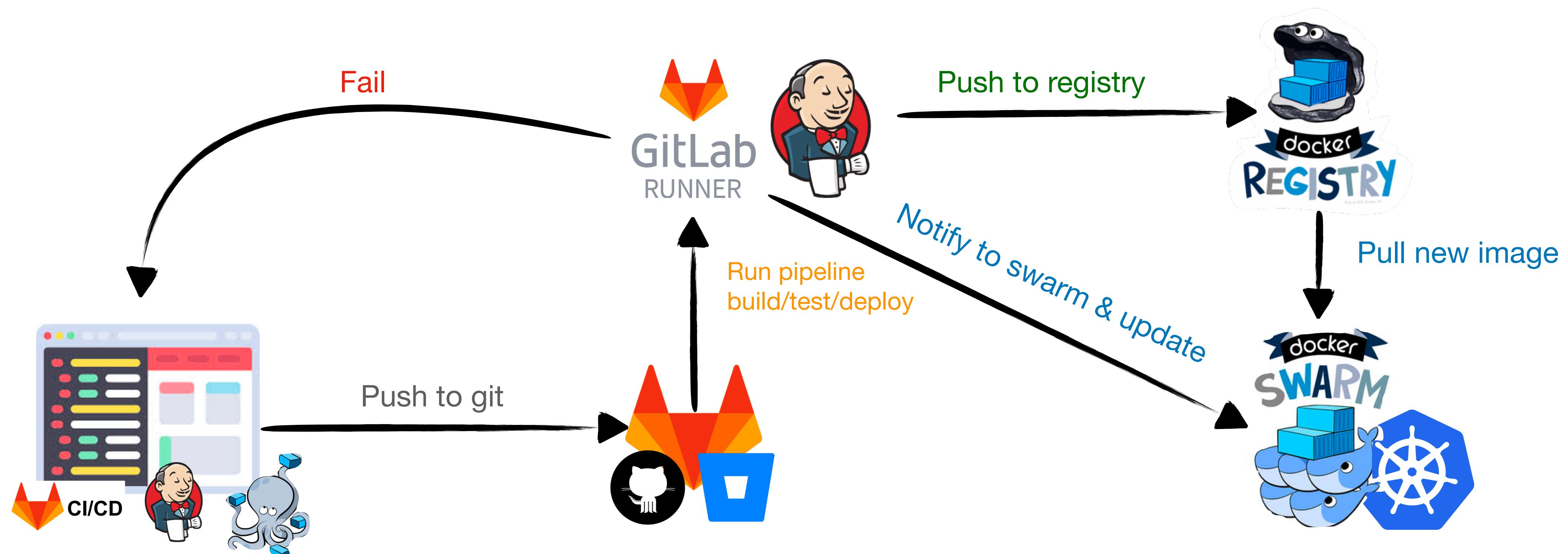
Some case



Some case



Full Automate Deploy





NGINX

PHP

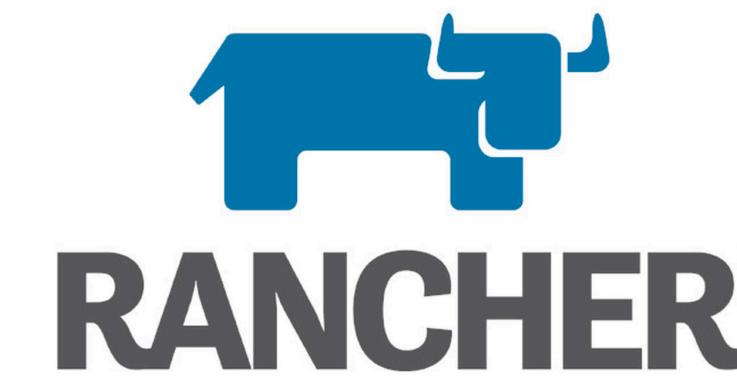
node.js



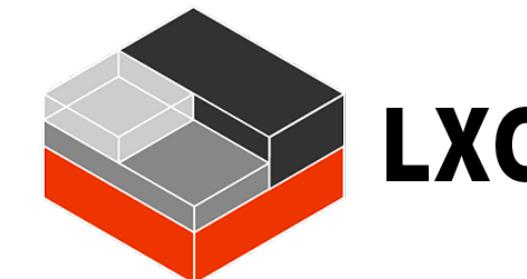
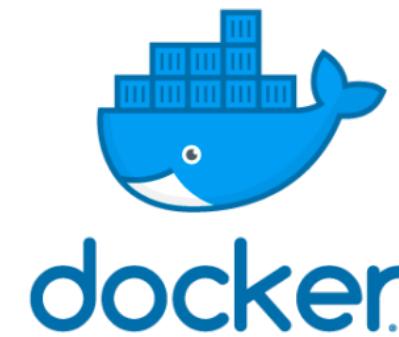
mongoDB

Service

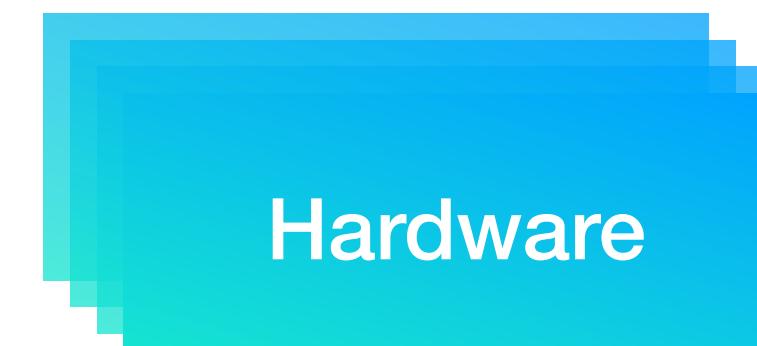
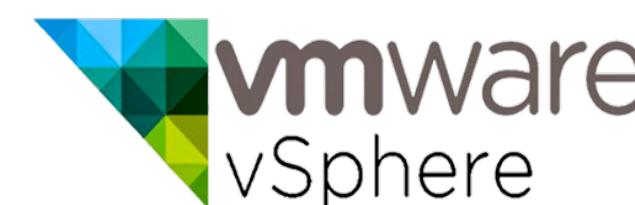
Orchestration tools



Container



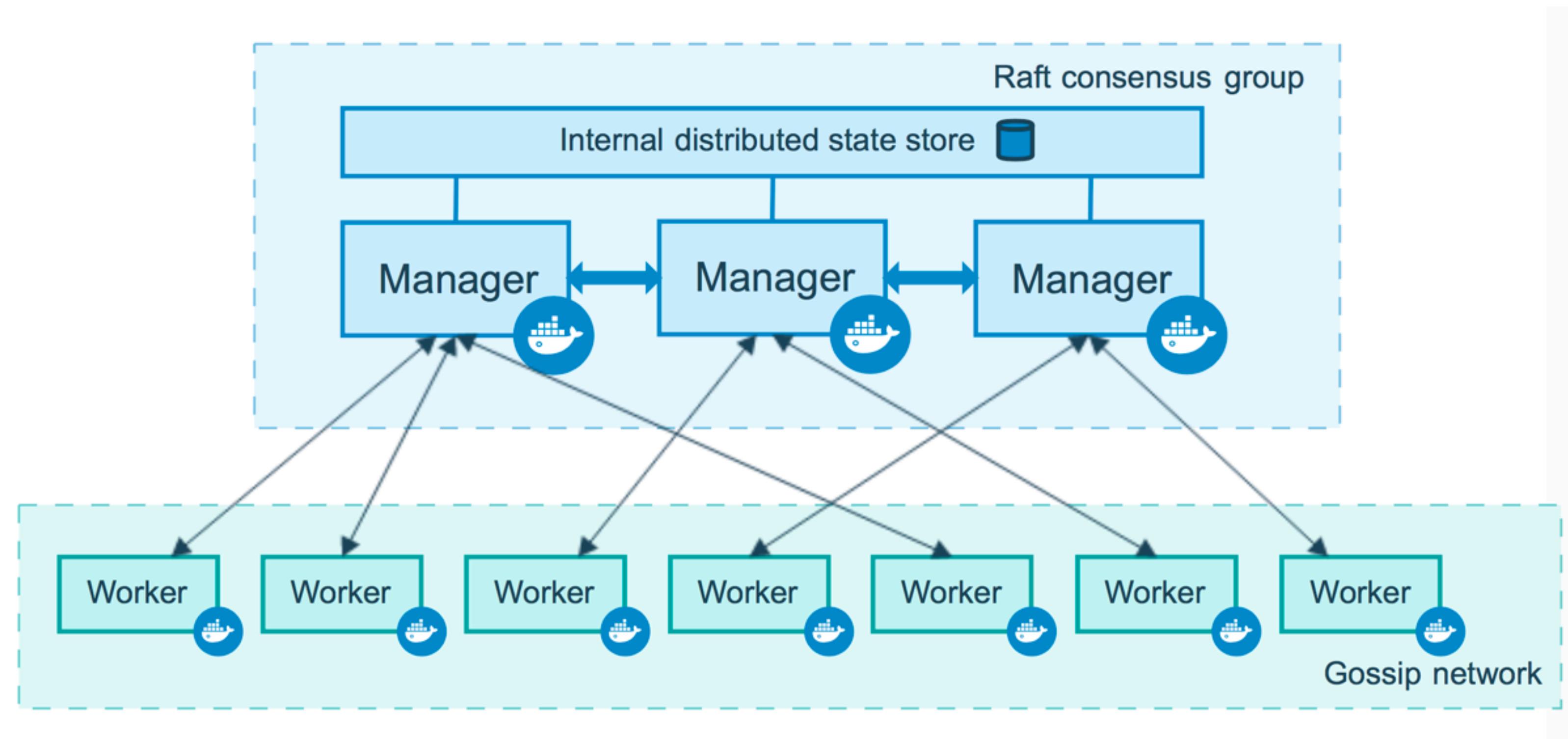
Cluster management



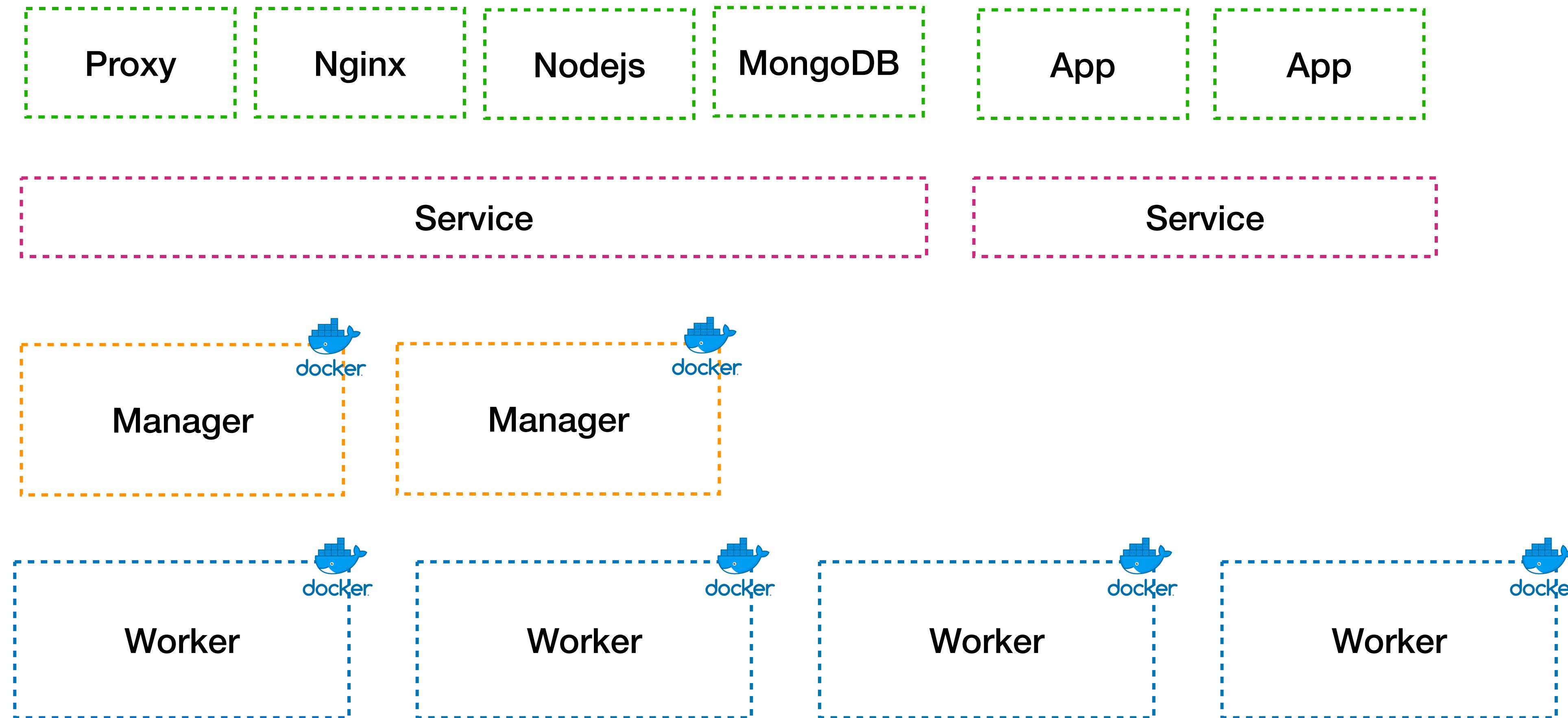


Docker + Swarm Mode

Concept



Concept



The cluster management and orchestration features embedded in the Docker Engine are built using swarmkit. Swarmkit is a separate project which implements Docker's orchestration layer and is used directly within Docker.



Setup Swarm Mode Cluster

- swarm init

```
$ docker swarm init --advertise-addr <ip-address>
```

- swarm join

```
$ docker swarm join --token <token key> <manager node ip-address:port>
```

- Create docker network

```
$ docker network create -d overlay app
```

Up and run service

- docker service create

```
$ docker service create \
--detach=false \
--name whoami \
--constraint node.role==worker \
--replicas 3 \
--network app \
emilevauge/whoami
```

Docker-compose

```
version: "3"

services:
  www:
    image: nginx
  networks:
    - app
  ports:
    - "8000:80"
  deploy:
    replicas: 2
    placement:
      constraints: [node.role == worker]

networks:
  app:
    external: true
```

Up and run service

- docker service inspect <service_name>
- docker service ls
- docker service rm <service_name>
- docker service update

Manage and scale

- service create
- service inspect
- service ls
- service rm <name>
- service scale <name>=size
- service ps <name>
- service update <name> <option>

Manage and scale

- docker node inspect <node>
- docker node promote <node>
- docker node demote <node>
- docker swarm leave



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Thank you

This is just the beginning