# lab03

### docker-compose.yml

```
version: "3"
services:
  registry:
    container_name: registry
    image: registry:latest
    ports:
      - 5000:5000
    volumes:
      - "./registry-data:/var/lib/registry"
  manager:
    container_name: manager
    image: docker:19.03.5-dind
    privileged: true
    tty: true
    ports:
      - 8080:80
      - 9000:9000
    depends_on:
      - registry
    expose:
      - 3375
    command: "--insecure-registry registry:5000"
    volumes:
      - "./stack:/stack"
  worker01:
    container_name: worker01
    hostname: worker01
    image: docker:19.03.5-dind
    privileged: true
    tty: true
    ports:
      - 8000:8000
    depends_on:
      - manager
      - registry
    expose:
      - 7946
      - 7946/udp
      - 4789/udp
    command: "--insecure-registry registry:5000"
  worker02:
    container_name: worker02
    hostname: worker02
    image: docker:19.03.5-dind
    privileged: true
    tty: true
```

```
ports:
    - 5001:5001
  depends_on:
   - manager
    - registry
  expose:
   - 7946
    - 7946/udp
    - 4789/udp
  command: "--insecure-registry registry:5000"
worker03:
  container_name: worker03
  image: docker:19.03.5-dind
  privileged: true
  tty: true
  depends_on:
    - manager
    - registry
  expose:
    - 7946
    - 7946/udp
    - 4789/udp
  command: "--insecure-registry registry:5000"
```

# todo-app.yml

```
version: "3"
networks:
   frontend:
        driver: overlay
        external: true
   backend:
        driver: overlay
        external: true
services:
   db:
        image: postgres:9.4
        deploy:
            replicas: 1
                constraints: [node.role != manager]
        networks:
            - backend
        volumes:
            db-data:/var/lib/postgresql/data
    result-app:
        image: bretfisher/examplevotingapp_result
        deploy:
            replicas: 1
                constraints: [node.hostname == worker02]
        ports:
           - 5001:80
        depends_on:
            - db
```

```
networks:
            - backend
    redis:
        image: redis:3.2
        deploy:
            replicas: 1
            placement:
                constraints: [node.role != manager]
        networks:
            - frontend
    worker:
        image: bretfisher/examplevotingapp_worker:java
        deploy:
            replicas: 1
            placement:
                constraints: [node.role != manager]
        depends_on:
            - redis
        networks:
            - frontend
            - backend
    voting-app:
        image: bretfisher/examplevotingapp_vote
        ports:
            - 8000:80
        deploy:
            replicas: 3
            placement:
                constraints: [node.hostname == worker01]
        depends_on:
            - worker
        networks:
            - frontend
volumes:
   db-data:
```

#### bash

```
PS C:\Users\HPE\Work\docker\lab\2.swarm\swarm-app-1> docker-compose up

# docker exec -it manager sh

# docker exec -it manager docker swarm init

# docker exec -it worker01 docker swarm join ...

# docker exec -it worker02 docker swarm join ...

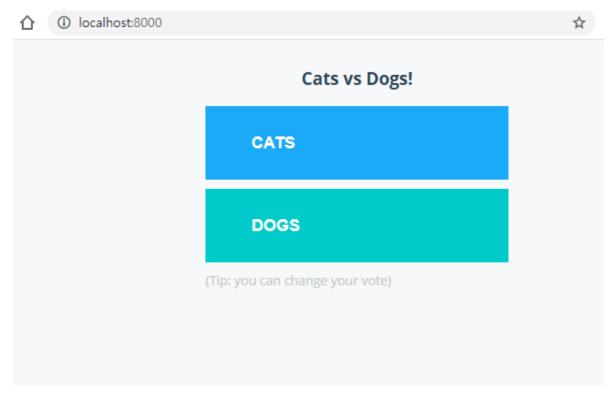
# docker exec -it worker03 docker swarm join ...

# docker exec -it manager docker network create --driver=overlay --attachable frontend

# docker exec -it manager docker network create --driver=overlay --attachable backend

# docker exec -it manager docker stack deploy -c /stack/todo-app.yml my-vote-app

# docker service ls
```



#### CATS 를 누르면

