

Docker compose

Docker compose

```
docker run rajiv123/simple-webapp
```

```
docker run mongodb
```

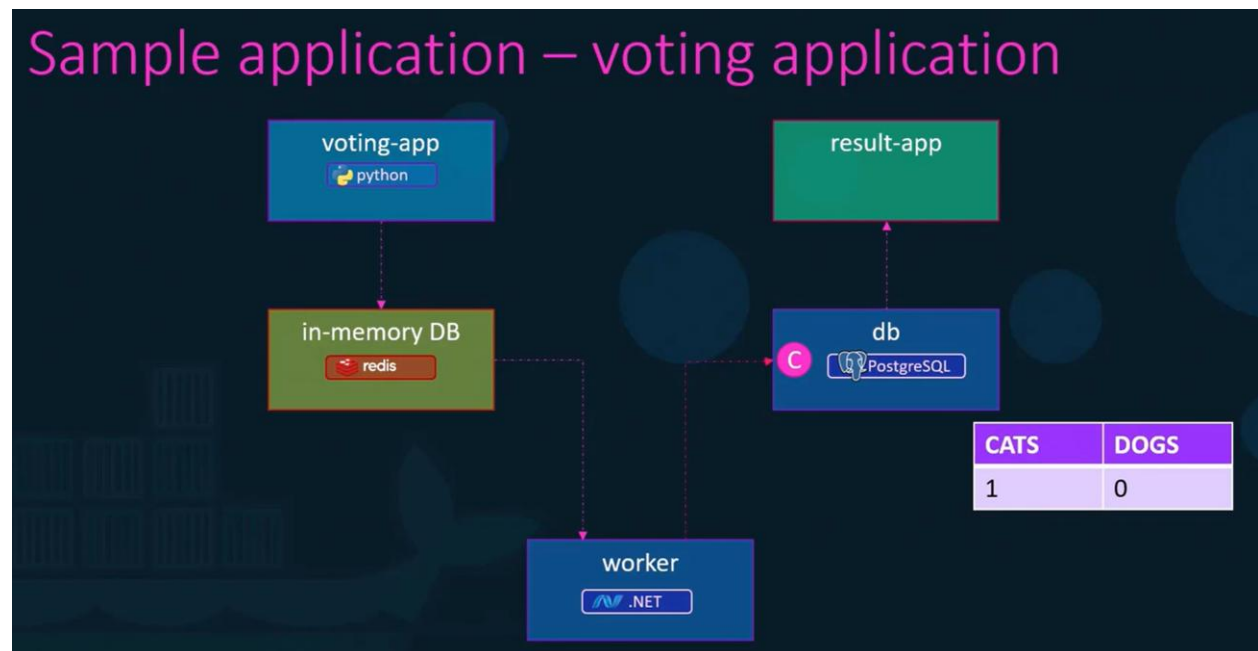

```
docker run redis:alpine
```

```
docker run ansible
```

```
docker-compose.yml
```

```
services:
  web:
    image: "rajiv123/simple-webapp"
  database:
    image: "mongodb"
  messaging:
    image: "redis:alpine"
  orchestration:
    image: "ansible"
```

Public Docker registry - dockerhub



docker run

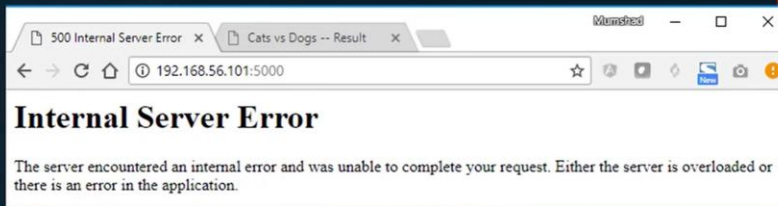
```
docker run -d --name=redis redis
```

```
docker run -d --name=db postgres
```

```
docker run -d --name=vote -p 5000:80 voting-app
```

```
docker run -d --name=result -p 5001:80 result-app
```

```
docker run -d --name=worker worker
```



docker run --links

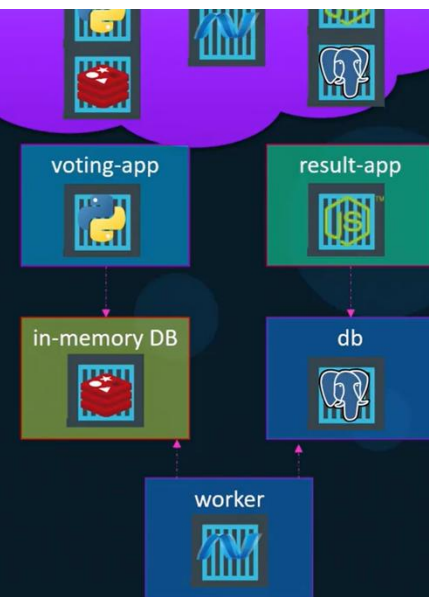
```
docker run -d --name=redis redis
```

```
docker run -d --name=db postgres
```

```
docker run -d --name=vote -p 5000:80 --link redis:redis voting-app
```

```
docker run -d --name=result -p 5001:80 --link db:db result-app
```

```
docker run -d --name=worker --link db:db --link redis:redis worker
```



Docker compose

```
docker run -d --name=redis redis
```

```
docker run -d --name=db postgres:9.4
```

```
docker run -d --name=vote -p 5000:80 --link redis:redis voting-app
```

```
docker run -d --name=result -p 5001:80 --link db:db result-app
```

```
docker run -d --name=worker --link db:db --link redis:redis worker
```

db:db = db

```
docker-compose up
```

docker-compose.yml

```
redis:
  image: redis
db:
  image: postgres:9.4
vote:
  image: voting-app
  ports:
    - 5000:80
  links:
    - redis
result:
  image: result-app
  ports:
    - 5001:80
  links:
    - db
worker:
  image: worker
  links:
    - redis
    - db
```

Docker compose - build

docker-compose.yml

```
redis:
  image: redis
db:
  image: postgres:9.4
vote:
  image: voting-app
  ports:
    - 5000:80
  links:
    - redis
result:
  image: result
  ports:
    - 5001:80
  links:
    - db
worker:
  image: worker
  links:
    - db
    - redis
```

docker-compose.yml

```
redis:
  image: redis
db:
  image: postgres:9.4
vote:
  build: ./vote
  ports:
    - 5000:80
  links:
    - redis
result:
  build: ./result
  ports:
    - 5001:80
  links:
    - db
worker:
  build: ./worker
  links:
    - db
    - redis
```

Docker compose - versions

docker-compose.yml

```
redis:
  image: redis
db:
  image: postgres:9.4
vote:
  image: voting-app
  ports:
    - 5000:80
  links:
    - redis
```

version: 1

docker-compose.yml

```
version: 2
services:
  redis:
    image: redis
  db:
    image: postgres:9.4
  vote:
    image: voting-app
    ports:
      - 5000:80
    depends_on:
      - redis
```

version: 2

docker-compose.yml

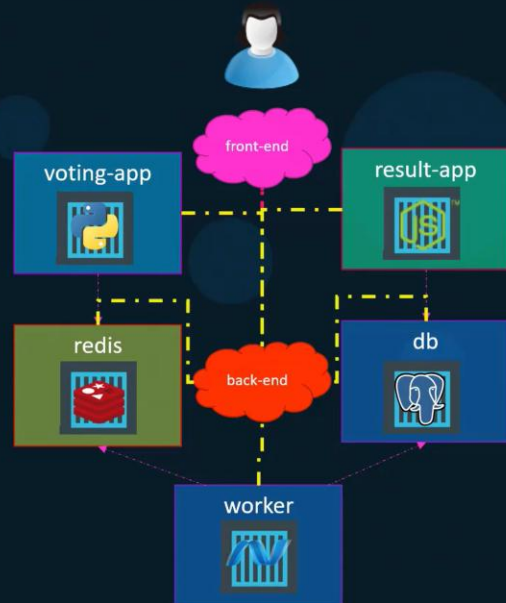
```
version: 3
services:
  redis:
    image: redis
  db:
    image: postgres:9.4
  vote:
    image: voting-app
    ports:
      - 5000:80
```

version: 3

Docker compose

docker-compose.yml

```
version: 2
services:
  redis:
    image: redis
    networks:
      - back-end
  db:
    image: postgres:9.4
    networks:
      - back-end
  vote:
    image: voting-app
    networks:
      - front-end
      - back-end
  result:
    image: result
    networks:
      - front-end
      - back-end
networks:
  front-end:
  back-end:
```



Compose Commands

▶ `docker-compose up`

▶ `docker-compose up -d`

▶ `docker-compose ps`

▶ `docker-compose logs`

▶ `docker-compose stop`

▶ `docker-compose start`

▶ `docker-compose stop`

▶ `docker-compose rm`

▶ `docker-compose down`

Command	Description
<code>docker compose build</code>	Build or rebuild services
<code>docker compose config</code>	Parse, resolve and render compose file in canonical format
<code>docker compose cp</code>	Copy files/folders between a service container and the local filesystem
<code>docker compose create</code>	Creates containers for a service.
<code>docker compose down</code>	Stop and remove containers, networks
<code>docker compose events</code>	Receive real time events from containers.
<code>docker compose exec</code>	Execute a command in a running container.
<code>docker compose images</code>	List images used by the created containers
<code>docker compose kill</code>	Force stop service containers.
<code>docker compose logs</code>	View output from containers
<code>docker compose ls</code>	List running compose projects
<code>docker compose pause</code>	Pause services
<code>docker compose port</code>	Print the public port for a port binding.
<code>docker compose ps</code>	List containers
<code>docker compose pull</code>	Pull service images
<code>docker compose push</code>	Push service images
<code>docker compose restart</code>	Restart service containers

<code>docker compose rm</code>	Removes stopped service containers
<code>docker compose run</code>	Run a one-off command on a service.
<code>docker compose start</code>	Start services
<code>docker compose stop</code>	Stop services
<code>docker compose top</code>	Display the running processes
<code>docker compose unpause</code>	Unpause services
<code>docker compose up</code>	Create and start containers
<code>docker compose version</code>	Show the Docker Compose version information
<code>docker compose down --rmi all</code>	Stop and remove all containers, networks, and all images used

Lab: show the voting app