

Docker-Compose

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Agenda

App overview

App Server code

Dockerfile & build image

Docker-Compose

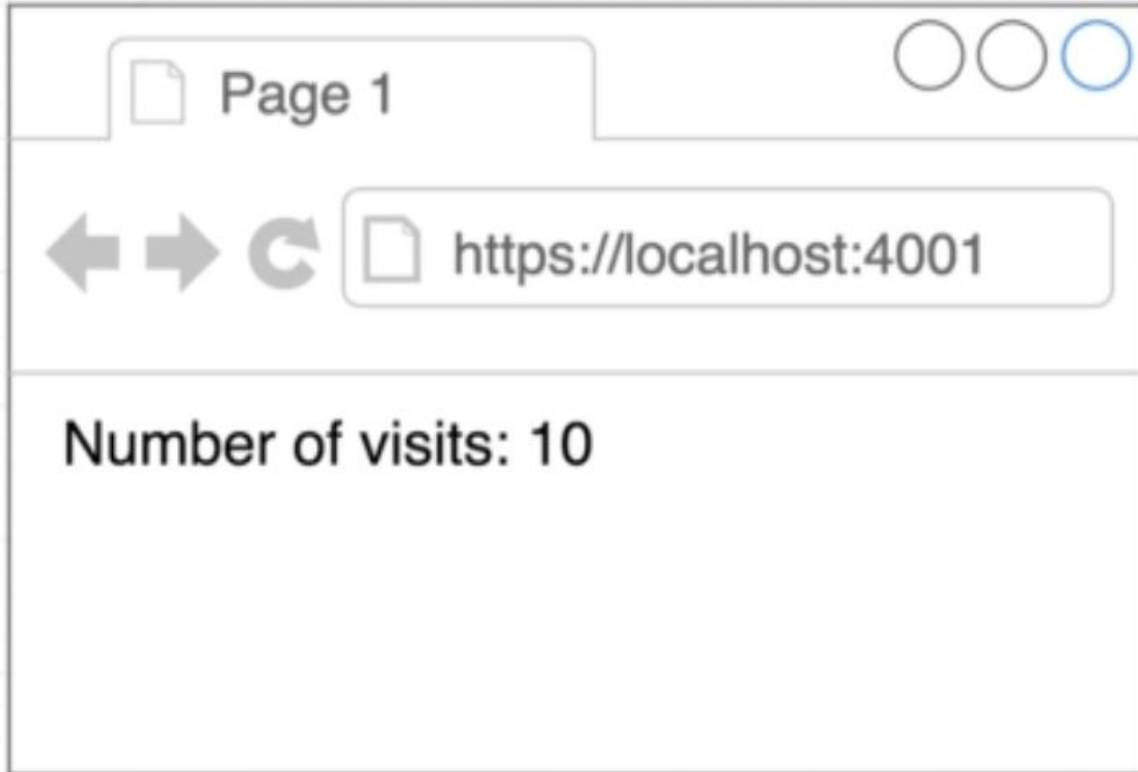
Docker-Compose file

Networking with Docker-Compose

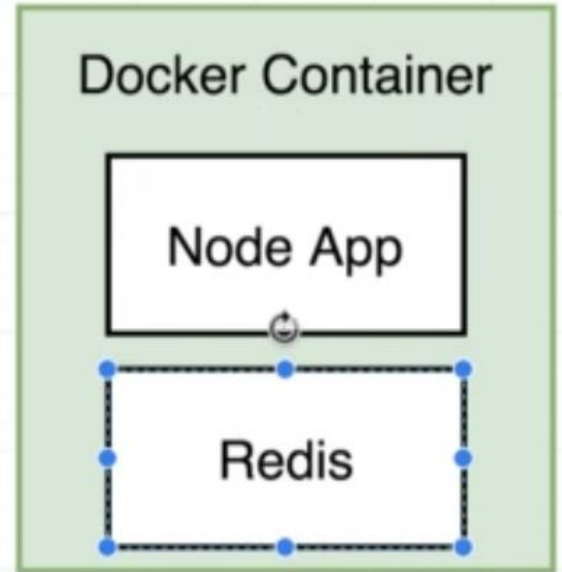
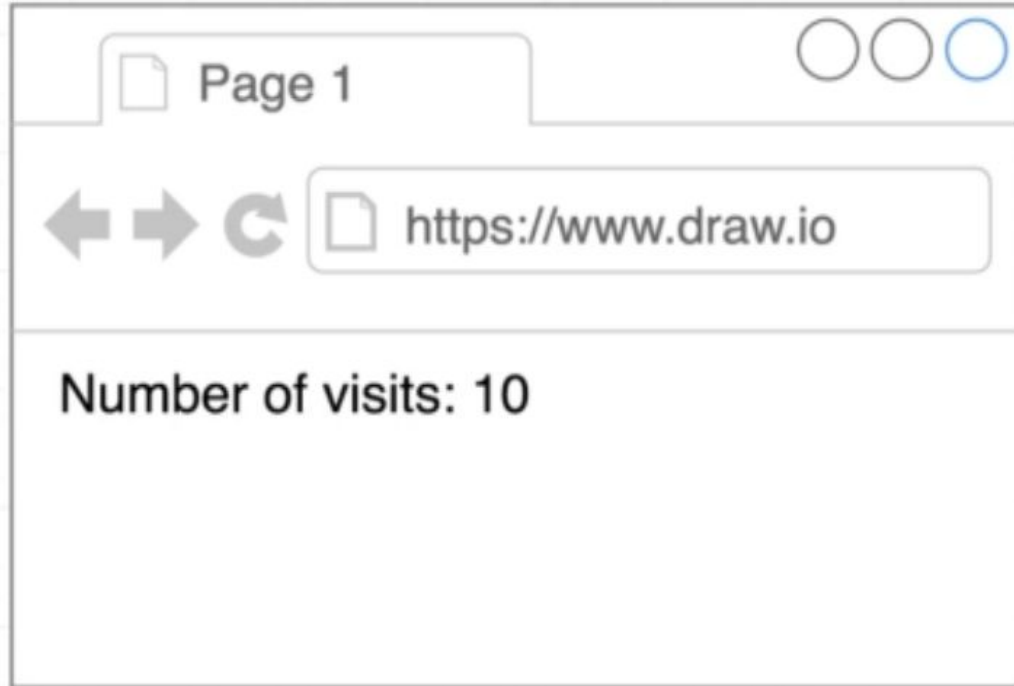
Docker-compose commands

Container maintenance using Docker-Compose

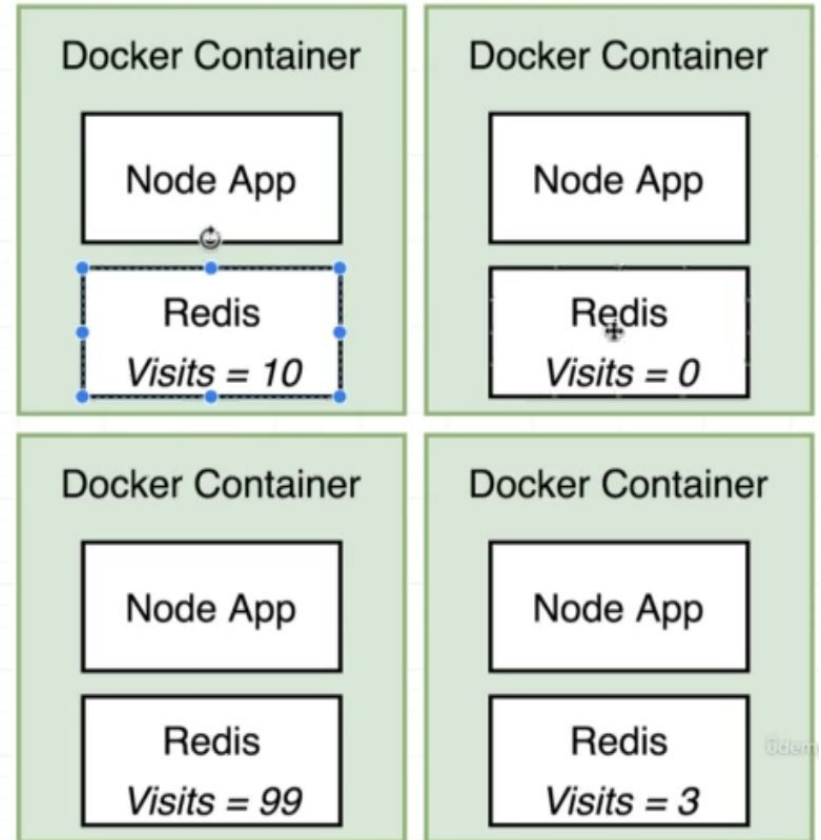
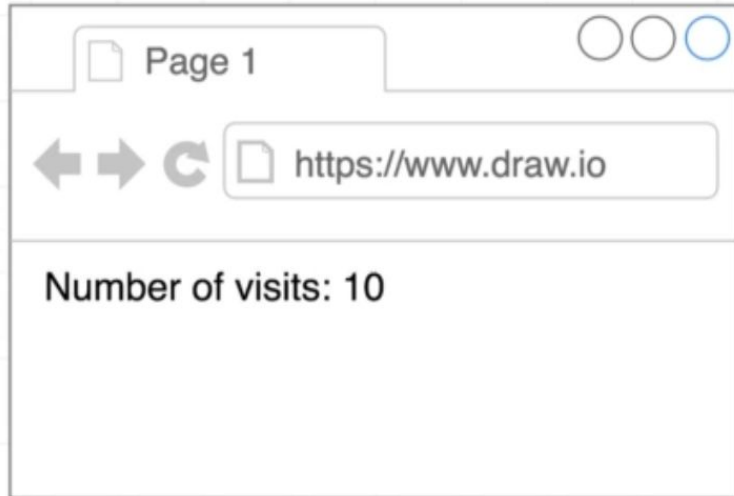
App overview



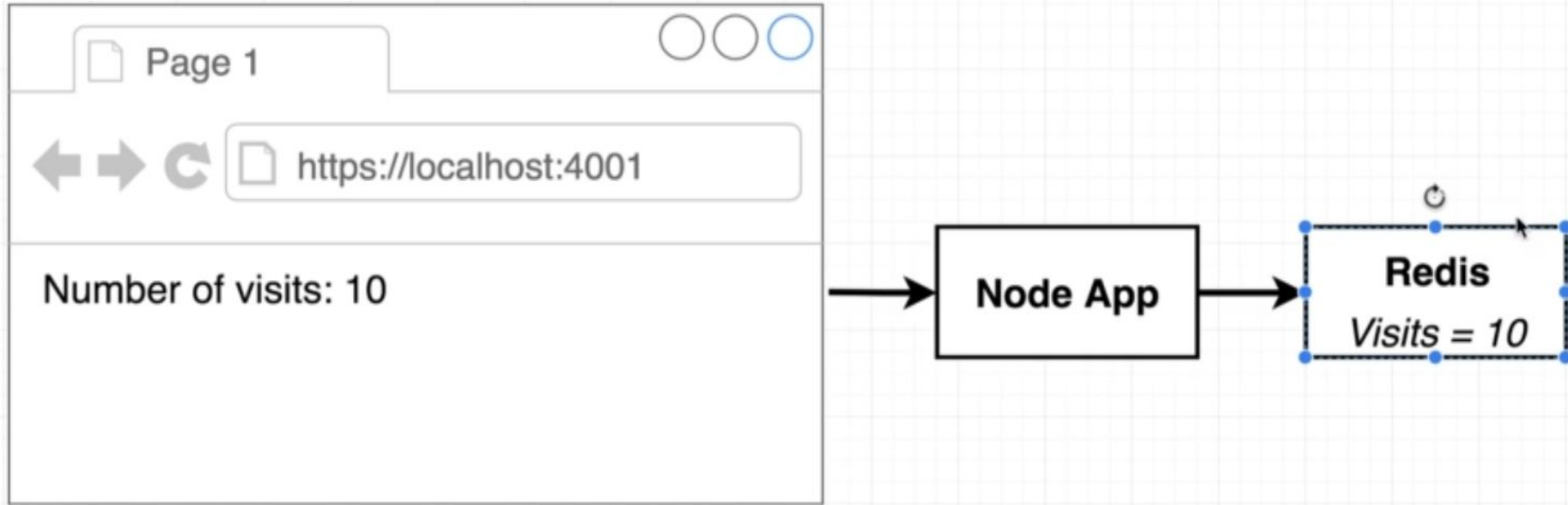
App overview



App overview



App overview



App Server code

Git referencee # <https://github.com/rupeshpanwar/docker-compose-app.git>

Dockerfile & build image

```
FROM node:alpine
```

```
WORKDIR '/app'
```

```
COPY package.json .
```

```
RUN npm install
```

```
COPY . .
```

```
CMD ["npm", "install"]
```


Docker Compose

FROM node:alpine

WORKDIR '/app'

COPY package.json .

RUN npm install

COPY . .

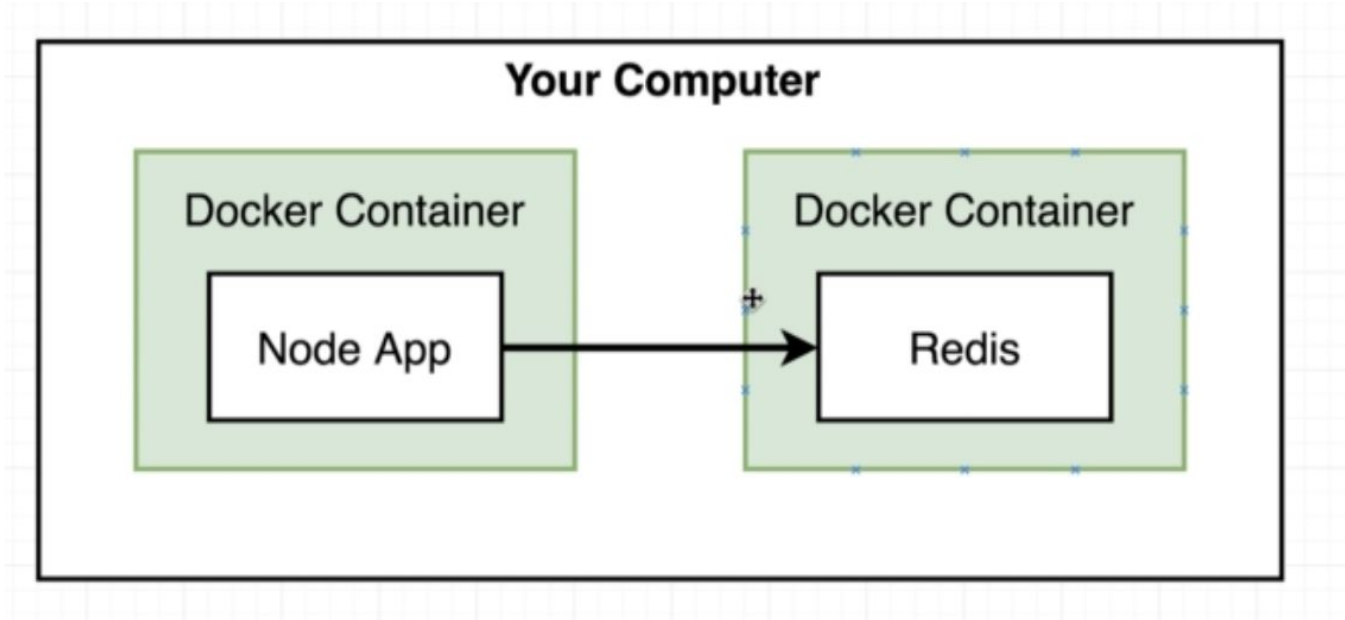
CMD ["npm", "start"]

\$ docker build -t rupeshpanwar/visits:latest .

\$ docker run rupeshpanwar/visits:latest

\$ docker run redis

Docker-Compose



Docker-Compose

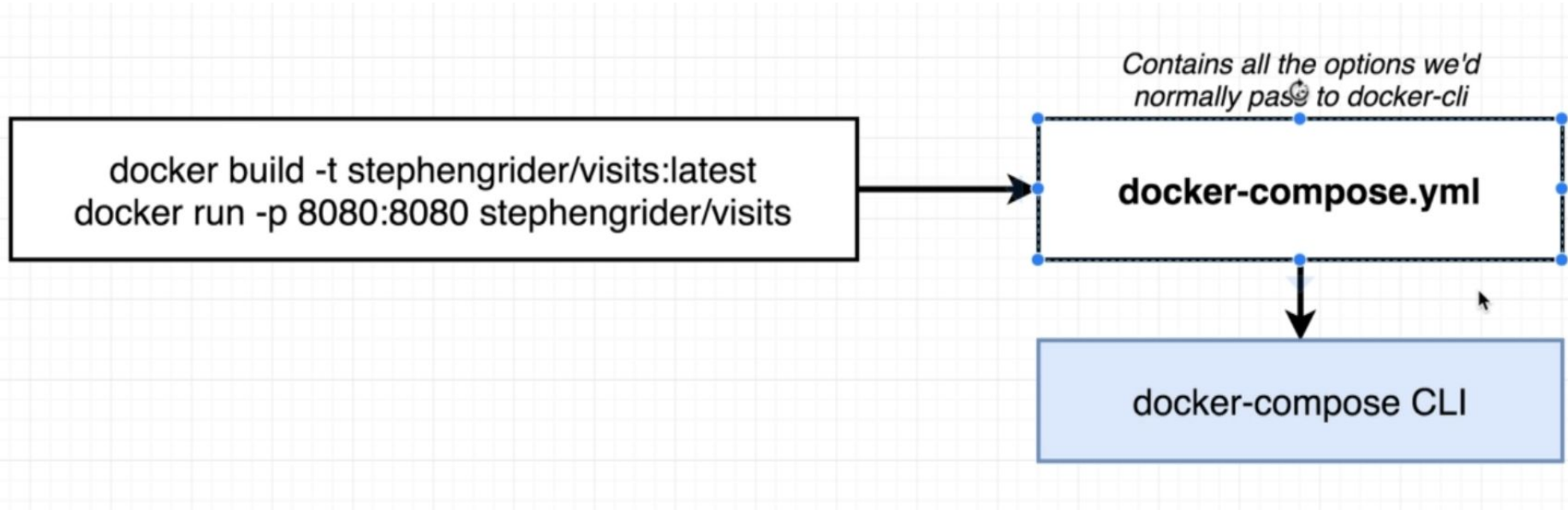
Docker Compose

Separate CLI that gets installed along with Docker

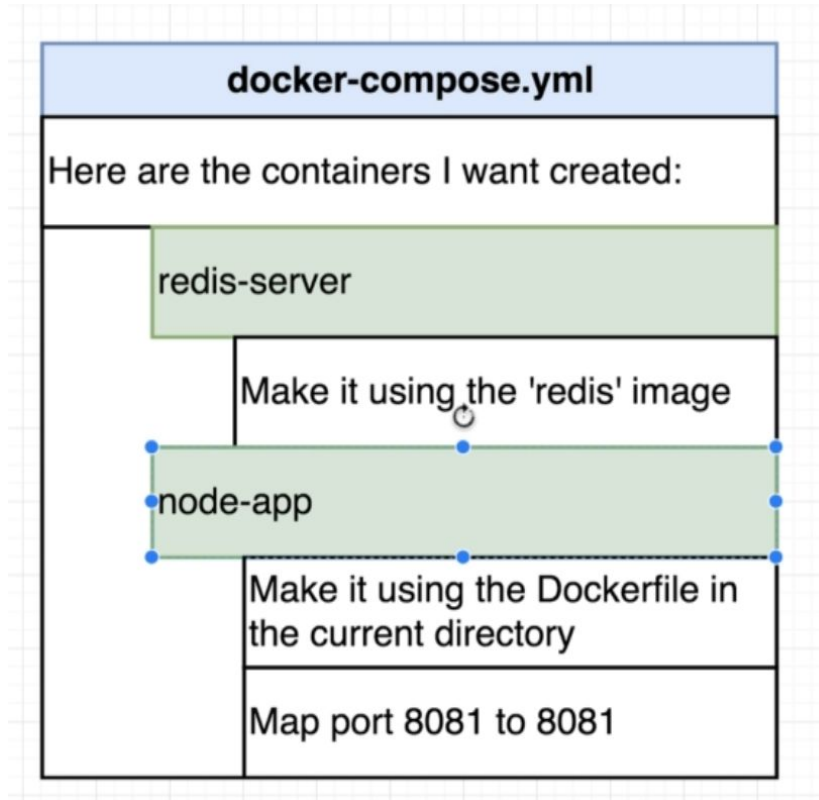
Used to start up multiple Docker containers at the same time

Automates some of the long-winded arguments we were passing to 'docker run'

Docker-Compose file



Docker-Compose file



Docker-Compose file

```
version: '3'
services:
  redis-server:
    image: 'redis'
  node-app:
    build: .
    ports:
      - "4001:8081"
```

Networking with Docker-compose

[+] Running 3/3

:: Network day5_default	Created	0.4s
:: Container day5_node-app_1	Start...	2.6s
:: Container day5_redis-server_1	S...	2.5s

Attaching to node-app-1, redis-server-1

Docker-Compose commands

`docker run myimage`

`docker-compose up`

`docker build .`

`docker run myimage`

`docker-compose up --build`

Docker-Compose commands

\$ docker stop containerID

\$ docker-compose down

\$ docker ps

\$ docker-compose ps

Container maintenance using Docker-Compose

```
$ docker-compose up --build
```

```
$ docker ps
```

Auto-Restart Container

Restart Policies

"no"	Never attempt to restart this . container if it stops or crashes
always	If this container stops *for any reason* always attempt to restart it
on-failure	Only restart if the container stops with an error code
unless-stopped	Always restart unless we (the developers) forcibly stop it