

// BEFORE

```
dockerfile example-frontend x dockerfile example-backend
example-frontend > dockerfile > ...
1  # Install node
2  FROM node
3
4  ENV REACT_APP_BACKEND_URL=http://localhost:8080/
5
6  WORKDIR /usr/src/app
7
8  EXPOSE 5000
9
10 # follow example node install instructions for LTS node 14.x on git
11 RUN curl -sL https://deb.nodesource.com/setup_14.x | bash
12 RUN apt install -y nodejs
13
14 # check install with node -v && npm -v
15 RUN node -v && npm -v
16
17 # Copy all of the content from the project to the image
18 COPY . .
19
20 # install all packages with npm install
21 RUN npm install
22
23 # run the project
24 # build the static files with npm run build to generate them into build folder
25 RUN npm run build
26
27 # Use npm package called serve to serve the project in port 5000
28 RUN npm install -g serve
29
30 #add an user "frontenduser"
31 RUN useradd -m frontenduser
32
33 #change user with the directive USER
34 USER frontenduser
35
36 # CMD echo $REACT_APP_BACKEND_URL
37 CMD ["serve", "-s", "-l", "5000", "build"]
38
```

```
dockerfile example-frontend  dockerfile example-backend X
example-backend > dockerfile > ...
1  # Install golang 1.16
2  FROM golang:1.16
3
4  # REQUEST_ORIGIN to pass an url through the cors check
5  ENV REQUEST_ORIGIN=http://localhost:5000
6
7  WORKDIR /usr/src/app
8
9  # project runs in a docker container with port 8080 published
10 EXPOSE 8080
11
12 COPY . .
13
14 # Run go build. It will generate a binary named "server"
15 RUN go build .
16
17 #add an user "backenduser"
18 RUN useradd -m backenduser
19
20 #change user with the directive USER
21 USER backenduser
22
23 # Execute the file
24 # CMD echo $REQUEST_ORIGIN
25 CMD [ "./server" ]
26
```

REPOSITORY	TAG	IMAGE ID	CREATED	SIZE
frontend	latest	97b41f80be71	29 minutes ago	1.34GB
backend	latest	338f36102152	34 minutes ago	1.07GB

// AFTER

```
FROM ubuntu:18.04

ENV REACT_APP_BACKEND_URL=http://localhost:8080/

WORKDIR /usr/src/app

EXPOSE 5000

COPY . .

RUN apt-get update && apt-get install -y curl && \
    curl -sL https://deb.nodesource.com/setup_lts.x | bash - && \
```

```
apt install -y nodejs && \  
npm install && \  
npm run build && \  
apt-get purge -y --auto-remove curl && \  
rm -rf /var/lib/apt/lists/* && \  
useradd -m frontenduser
```

USER frontenduser

CMD ["serve", "-s", "-l", "5000", "build"]

REPOSITORY	TAG	IMAGE ID	CREATED	SIZE
frontend	latest	38ab3eaf84e5	24 minutes ago	448MB

FROM ubuntu:18.04

ENV REQUEST_ORIGIN=http://localhost:5000

WORKDIR /usr/src/app

EXPOSE 8080

COPY . .

```
RUN apt-get update && apt-get install -y --no-install-recommends wget ca-  
certificates && \  
    # apt-get install -y --no-install-recommends ca-certificates && \  
    wget https://dl.google.com/go/go1.13.linux-amd64.tar.gz && \  
    tar -C /usr/local -xzf go1.13.linux-amd64.tar.gz && \  
    rm go1.13.linux-amd64.tar.gz && \  
    /usr/local/go/bin/go build . && \  
    apt-get purge -y --auto-remove wget && \  
    apt-get purge -y --auto-remove ca-certificates && \  
    rm -rf /var/lib/apt/lists/* && \  
    useradd -m backenduser
```

USER backenduser

CMD ["/server"]

REPOSITORY	TAG	IMAGE ID	CREATED	SIZE
backend	latest	f1c9493dec2b	4 seconds ago	524MB