Docker (An opinionated guide)

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Overview

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What is Docker?

"Docker is the company driving the container movement and the only container platform provider to address every application across the hybrid cloud." [Docker, 2018]

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- Aliquam blandit faucibus nisi, sit amet dapibus enim tempus eu
- Nulla commodo, erat quis gravida posuere, elit lacus lobortis est, quis porttitor odio mauris at libero
- Nam cursus est eget velit posuere pellentesque
- Vestibulum faucibus velit a augue condimentum quis convallis nulla gravida

Using Columns

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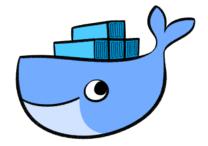


Figure: Docker

Why Use Docker?

- Lorem ipsum dolor sit amet, consectetur adipiscing elit
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Docker File Commands

FROM

This will import a base image.

COPY

This will copy files into the image.

Example Docker File

Example (Base Image for all ours apps in production)

```
FROM node:carbon
# Set working directory for container
ENV HOME=/usr/src/app
WORKDIR $HOME
# Need to install aws-cli so the container can get the environment file on startup.
RUN apt-get update
RUN apt-get install -qq -y python-pip libpython-dev
RUN curl -O https://bootstrap.pypa.io/get-pip.py
RUN python get-pip.py
RUN pip install awscli
# Install vim for development
RUN apt-get install vim -v
RUN mkdir -p $HOME
RUN mkdir -p $HOME/logs
# Give everyone including node user the ability to execute/read/write to app directory.
# Need to write to app so we can run startup script.
RUN chmod -R o+rwx /usr/src/app
COPY ./.aws $HOME/.aws
RUN aws s3 cp s3://glabs-npmrc/.npmrc ./.npmrc
RUN npm i -g pm2
COPY ./setup.sh $HOME
```

Example Docker File

Example (We expand on that base image for each app)

```
FROM 168489741608.dkr.ecr.eu-west-3.amazonaws.com/production-env:latest

COPY ./package.json $HOME/
COPY ./dist $HOME/dist/
COPY ./UI/dist $HOME/UI/dist/

ENV NODE_ENV=production
RUN npm install

ENV JSON=rules-engine.json

# Setup will get env file and set VPC dependent env variables.

CMD ["bash","/usr/src/app/setup.sh"]
```

Docker CLI

What you can do with the angular cli.

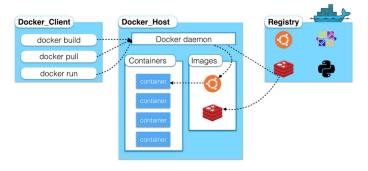


Figure: Docker

Docker Compose

FROM

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COPY

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References



Docker (2018)

What is Docker

https://www.docker.com/what-docker

The End