

Building Custom Images with Dockerfile



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Module Agenda

Getting Started with Dockerfile

Creating a Custom DockerFile

Building a Custom Image

Publishing an Image to
Docker Hub



Question



How do you get source code into a container?



Answer

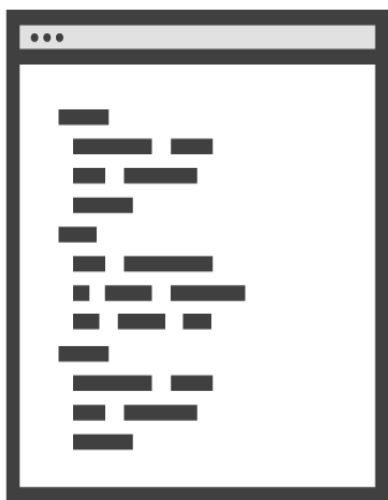


1. Create a container volume that points to the source code.
2. Add your source code into a custom image that is used to create a container.

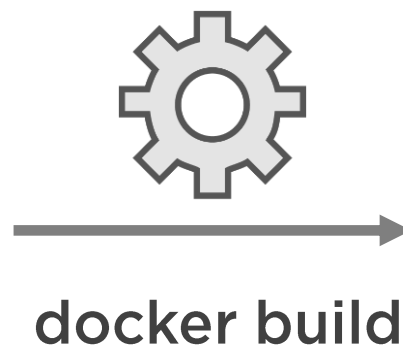
Getting Started with Dockerfile



Dockerfile and Images



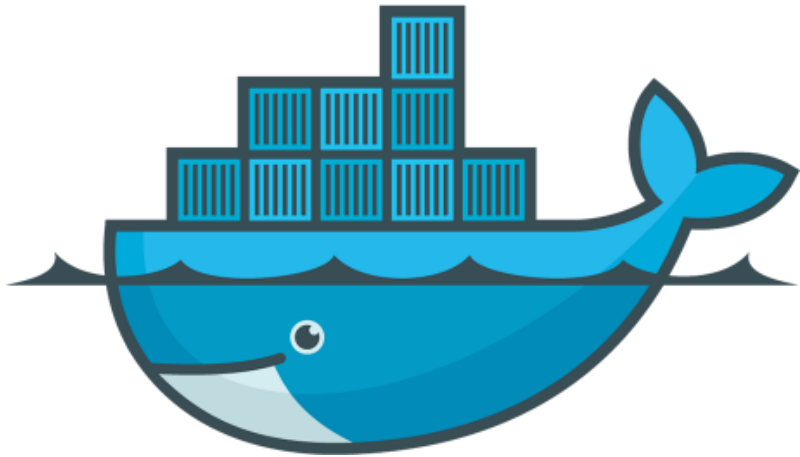
Dockerfile



Docker Image



Dockerfile Overview



Text file used to build Docker images

Contains build instructions

Instructions create intermediate image that can be cached to speed up future builds

Used with "docker build" command



Key Dockerfile Instructions

FROM

MAINTAINER

RUN

COPY

ENTRYPOINT

WORKDIR

EXPOSE

ENV

VOLUME



Dockerfile Example

```
FROM          node
MAINTAINER    Dan Wahlin
COPY          . /var/www
WORKDIR       /var/www
RUN           npm install
EXPOSE        8080
ENTRYPOINT    ["node", "server.js"]
```



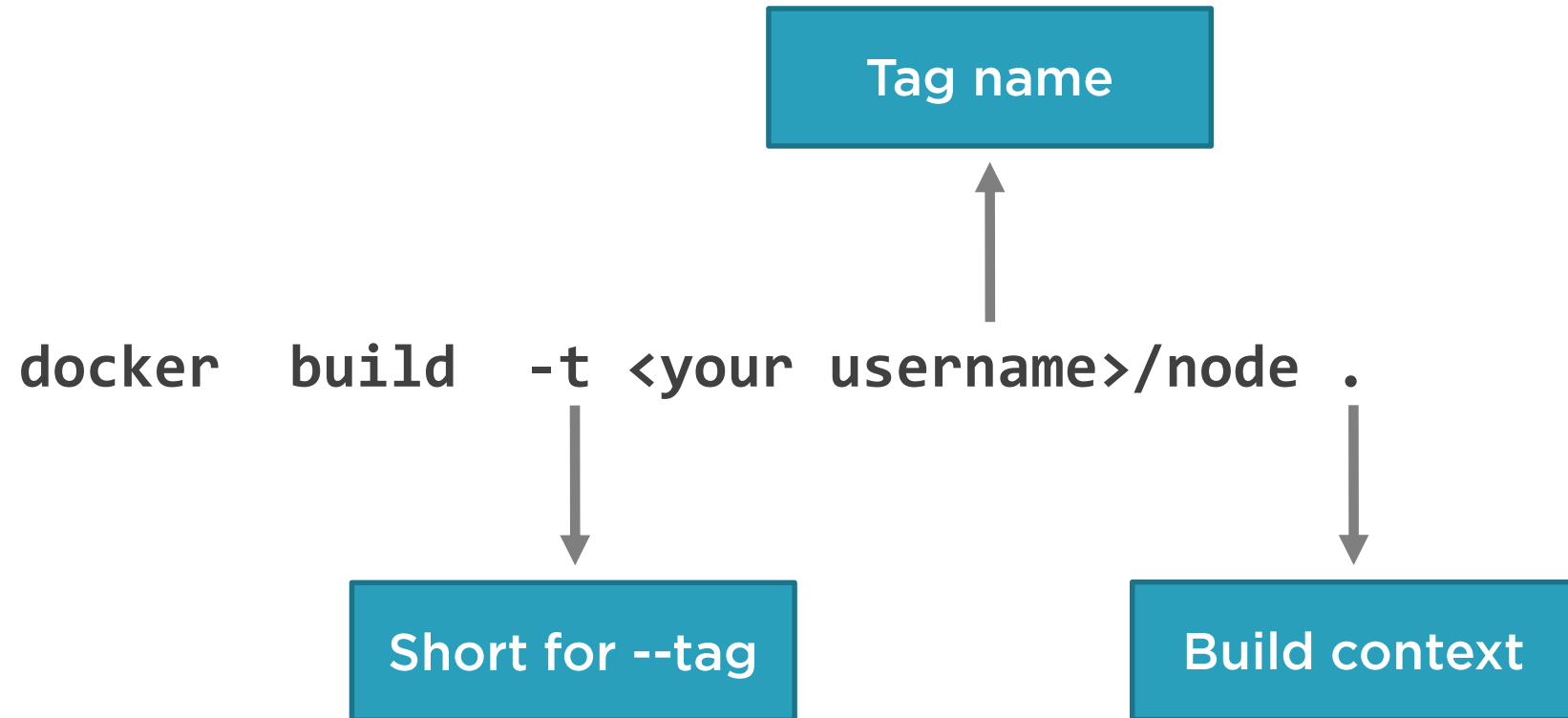
Creating a Custom Node.js Dockerfile



Building a Node.js Image



Building a Custom Image



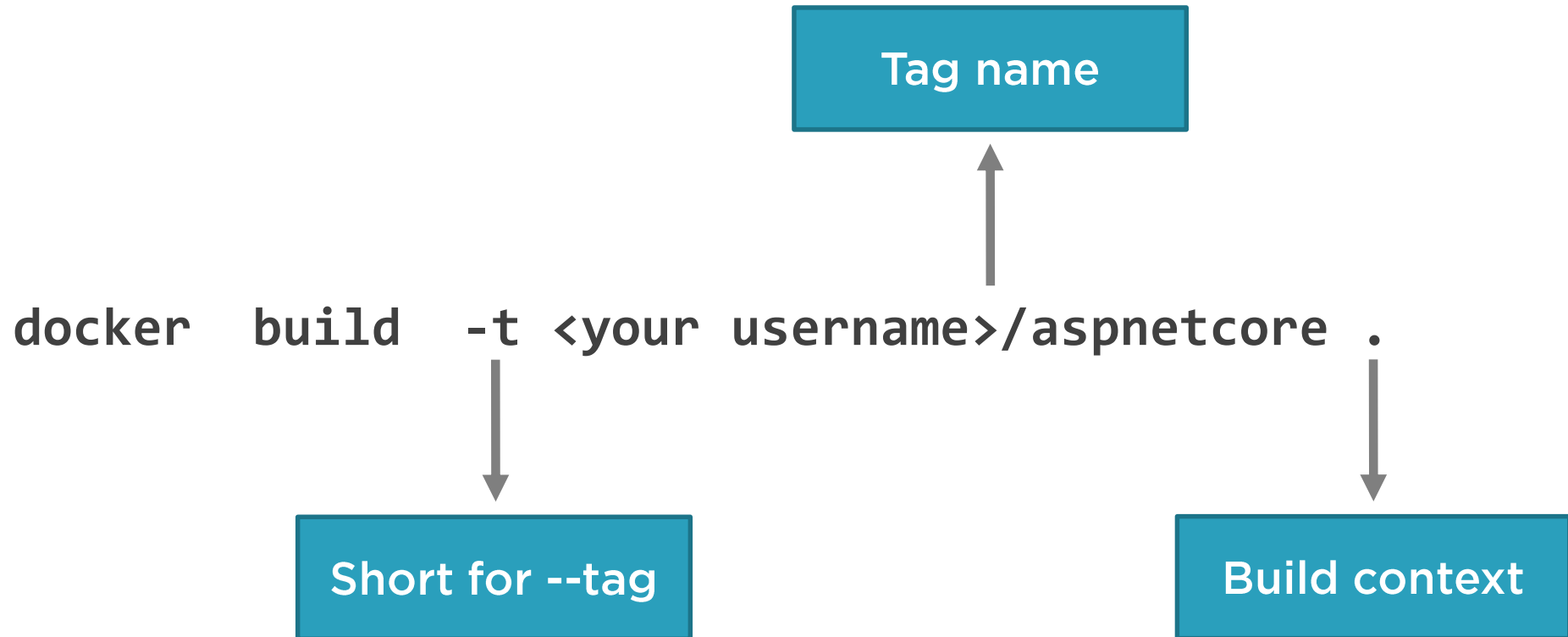
Creating a Custom ASP.NET Core Dockerfile



Building an ASP.NET Core Image



Building a Custom Image

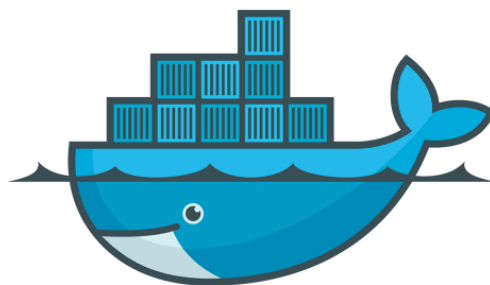


Publishing an Image to Docker Hub



Publishing an Image to Docker Hub

```
docker push <your username>/node
```



Docker Registry



Summary



Dockerfile is a simple text file with instructions that is used to create an image

Each Dockerfile starts with a FROM instruction

Custom images are built using:
`docker build -t <username>/imageName`

Images can be pushed to Docker Hub

