Building Custom Images with Dockerfile

Dan Wahlin

WAHLIN CONSULTING

@danwahlin   www.codewithdan.com

Module Agenda

Getting Started with Dockerfile

Creating a Custom DockerFile

Building a Custom Image

Publishing an Image to Docker Hub

Question

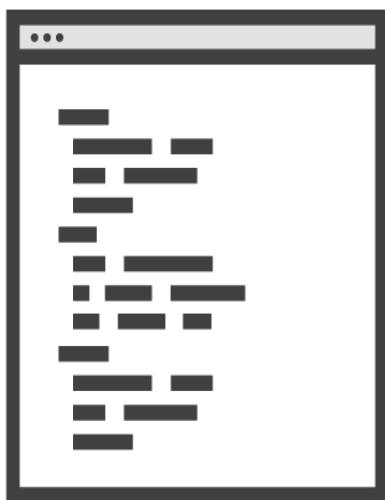How do you get source code into a container?

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.
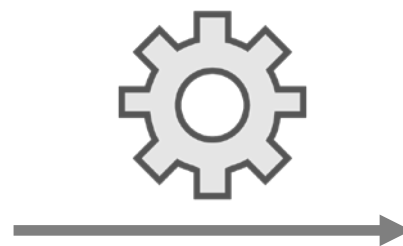
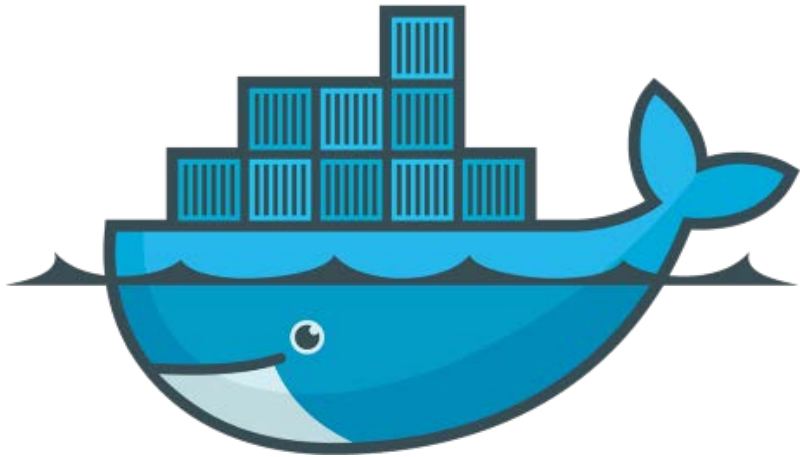# Getting Started with Dockerfile

Dockerfile and Images

Dockerfile → **docker build** → **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"]
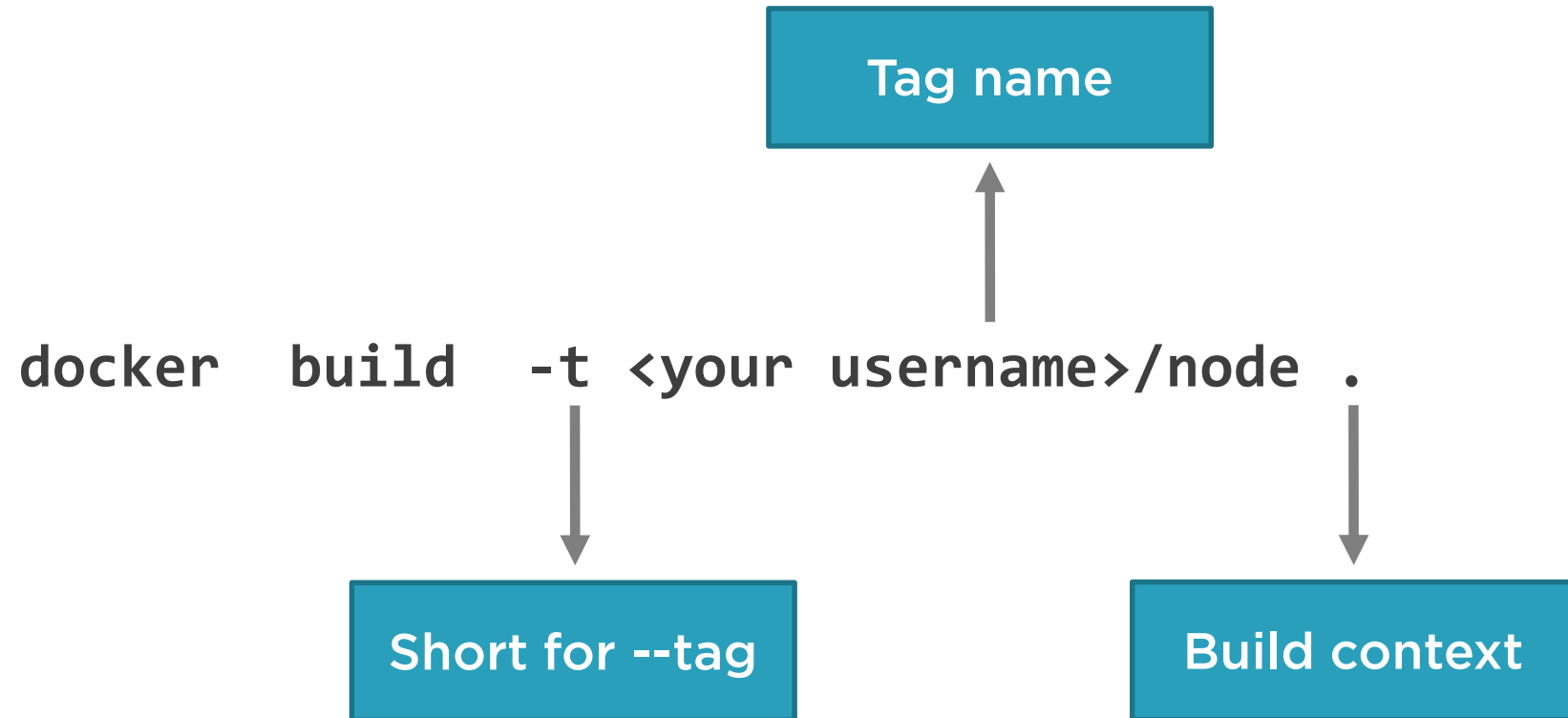```

# Creating a Custom Node.js Dockerfile

# Building a Node.js Image

# Building a Custom Image

Tag name

```
docker  build  -t <your username>/node  .
```

Short for --tag

Build context

Creating a Custom ASP.NET Core Dockerfile

Building an ASP.NET Core Image

Building a Custom Image

Tag name

```
docker  build  -t <your username>/aspnetcore  .
```

Short for --tag

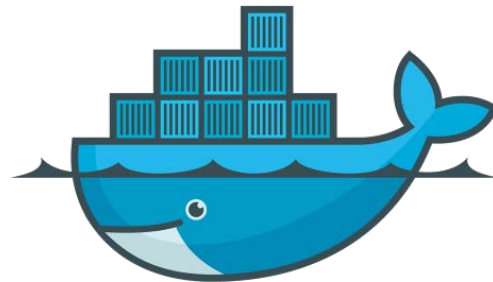Build context
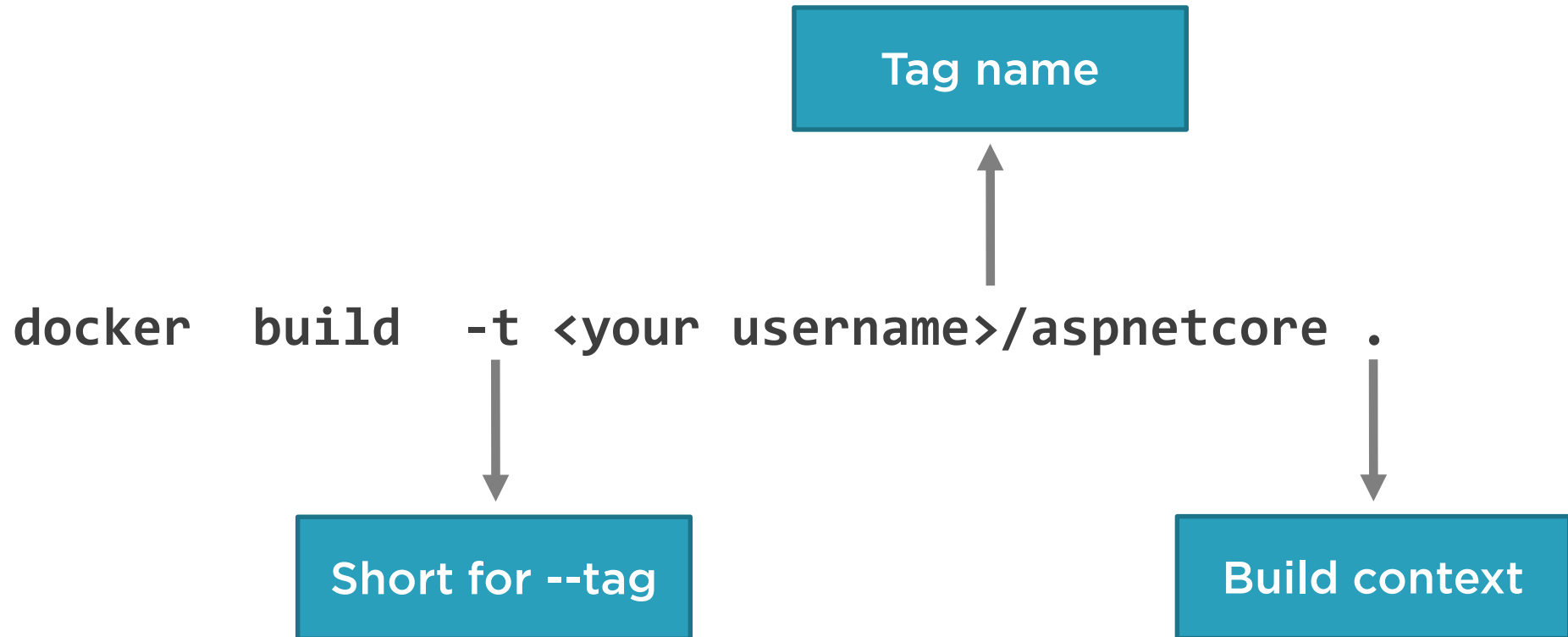
Publishing an Image to Docker Hub

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