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Freelance web & mobile applications developer

How To Code Well YouTube channel

youtube.com/howtocodewell



Author of Docker In Motion

From Manning Publications

40%
off code
dockphpsc



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How to put your Docker image on a diet



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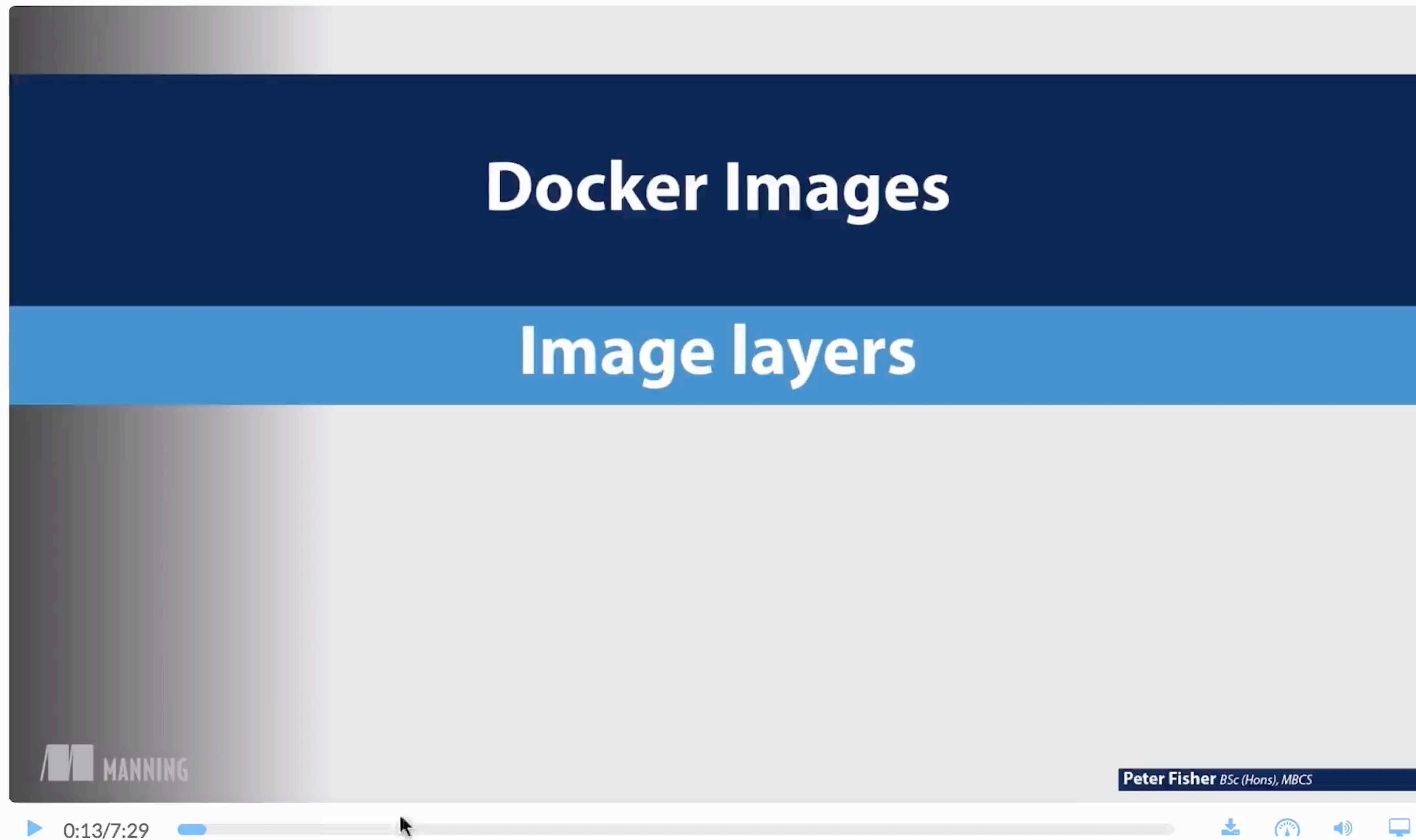
What is the point in having a small image?

- **Speed of deployment**
- **Cost**

Docker is not just about containers!

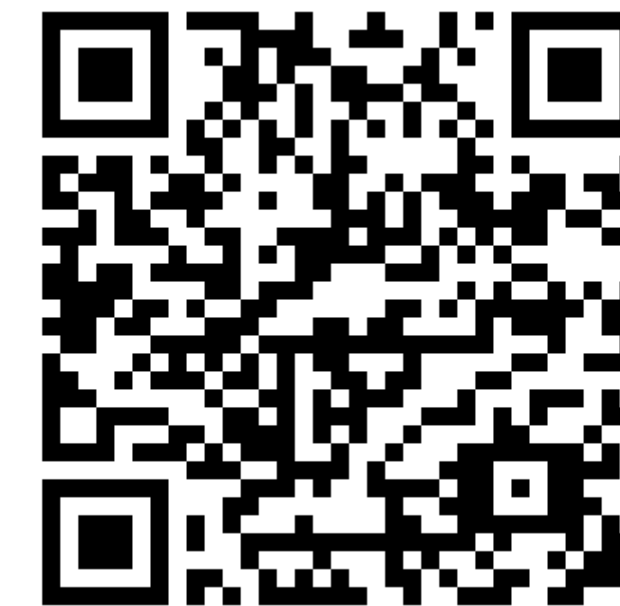


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All examples can be found on

<https://github.com/pfwd/how-to-put-your-docker-image-on-a-diet>



<https://hub.docker.com/r/howtocodewell/how-to-put-your-docker-image-on-a-diet>



How to put your Docker image on a diet

Peter Fisher BSC MBSC

```
5 FROM ubuntu:latest
6
7 ARG DEBIAN_FRONTEND=noninteractive
8
9 ENV DOC_ROOT /var/www/mysite
10
11 RUN apt-get update -y
12
13 RUN apt-get install -y git
14
15 RUN apt-get install -y apache2
16
17 RUN apt-get install -y libapache2-mod-php
18
19 RUN apt-get install -y php7.0*
20
21 RUN a2enmod rewrite
22
23 ADD config/sites-available/000-default.conf /etc/apache2/sites-available/000-default.conf
24
25 WORKDIR ${DOC_ROOT}
26
27 COPY site .
28
29 RUN chown -R www-data:www-data var
30
31 EXPOSE 80
32
33 CMD apachectl -D FOREGROUND
```

tag 0.1.0 593MB

6 run instructions



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How to put your Docker image on a diet

Peter Fisher BSC MBSC

```
5 FROM ubuntu:latest
6
7 ARG DEBIAN_FRONTEND=noninteractive
8
9 ENV DOC_ROOT /var/www/mysite
10
11 RUN apt-get update -y \
12     && \
13     apt-get install -y \
14         git \
15         apache2 \
16         libapache2-mod-php \
17         php7.0* \
18     && \
19     a2enmod rewrite
20
21 ADD config/sites-available/000-default.conf /etc/apache2/sites-available/000-default.conf
22
23 WORKDIR ${DOC_ROOT}
24
25 COPY site .
26
27 RUN chown -R www-data:www-data var
28
29 EXPOSE 80
30
31 CMD apachectl -D FOREGROUND
```

tag 0.2.0 588MB

1 run instruction



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* Should give you nightmares

How to put your Docker image on a diet

Peter Fisher BSC MBSC

```
5 FROM ubuntu:latest
6
7 ARG DEBIAN_FRONTEND=noninteractive
8
9 ENV DOC_ROOT /var/www/mysite
10
11 RUN apt-get update -y \
12     && \
13     apt-get install -y \
14         apache2 \
15         libapache2-mod-php \
16         php7.0 php7.0-cli php7.0-xml \
17     && \
18     a2enmod rewrite
19
20 ADD config/sites-available/000-default.conf /etc/apache2/sites-available/000-default.conf
21
22 WORKDIR ${DOC_ROOT}
23
24 COPY site .
25
26 RUN chown -R www-data:www-data var
27
28 EXPOSE 80
29
30 CMD apachectl -D FOREGROUND
```

tag 0.3.0 314MB

Only install what you need



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How to put your Docker image on a diet

Peter Fisher BSC MBSC



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How to put your Docker image on a diet

Peter Fisher BSC MBSC

```
5 FROM ubuntu:latest
6
7 ARG DEBIAN_FRONTEND=noninteractive
8
9 ENV DOC_ROOT /var/www/mysite
10
11 RUN apt-get update -y \
12     && \
13     apt-get install -y \
14         apache2 \
15         libapache2-mod-php \
16         php7.0 php7.0-cli php7.0-xml \
17     && \
18     a2enmod rewrite \
19     && \
20     apt-get autoremove -y --purge \
21     && \
22     rm -rf /var/lib/apt/lists/*
23
24 ADD config/sites-available/000-default.conf /etc/apache2/sites-available/000-default.conf
25
26 WORKDIR ${DOC_ROOT}
27
28 COPY site .
29
30 RUN chown -R www-data:www-data var
31
32 EXPOSE 80
33
34 CMD apachectl -D FOREGROUND
```

tag 0.4.0 275MB

Removing what we don't need



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How to put your Docker image on a diet

Peter Fisher BSC MBSC

```
5 FROM debian:stretch
6
7 ARG DEBIAN_FRONTEND=noninteractive
8
9 ENV DOC_ROOT /var/www/html
10
11 RUN apt-get update \
12     && \
13     apt-get install -y \
14         apache2 \
15         libapache2-mod-php \
16         php7.0 php7.0-cli php7.0-xml \
17     && \
18     a2enmod rewrite \
19     && \
20     apt-get autoremove -y --purge \
21     && \
22     rm -rf /var/lib/apt/lists/*
23
24 ADD config/sites-available/000-default.conf /etc/apache2/sites-available/000-default.conf
25
26 WORKDIR ${DOC_ROOT}
27
28 COPY site .
29
30 RUN chown -R www-data:www-data var
31
32 EXPOSE 80
33
34 CMD apachectl -D FOREGROUND
```

Using a smaller base image

tag 0.5.0

262MB



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How to put your Docker image on a diet

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```
$ docker build -t pleaseGiveMe/feedback:thanks .
```

```
1  .*
2  /tmp/*
3  /log
4  **/*.md
5  **/vendor/**/Tests
6  site/build
7  site/var/cache
8  site/var/logs
9  site/var/sessions
10 site/web/app_dev.php
11 site/bin/symfony_requirements
```

tag 0.6.0

252MB

Ignoring from the build context



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> 50% smaller!

Tag	Image Size	Dockerfile	Github
0.1.0	593MB	Dockerfile	Tag 0.1.0
0.2.0	588MB	Dockerfile	Tag 0.2.0
0.3.0	314MB	Dockerfile	Tag 0.3.0
0.4.0	275MB	Dockerfile	Tag 0.4.0
0.5.0	262MB	Dockerfile	Tag 0.5.0
0.6.0	252MB	Dockerfile	Tag 0.6.0

Thank you!

Questions?

peterfisher.me.uk



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Feedback & Questions

joinind.in/talk/a866f

What did you think?



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