

studio.kodekloud.com/labs/docker/docker_cmd_entrypoint

Back to Domain Docker CMD & Entrypoint Learn the difference between CMD and ENTRYPOINT in Dockerfiles. Intermediate 60-90 min

Task AI Assistant (Beta) 33:20

1/6

Dockerfiles for a few commonly used Docker Images are given in the `/root` (current) directory. Inspect them and try to answer the following questions.

Ok

Terminal 1

Welcome to the Kodekloud Hands-On lab

ADVANCED

All rights reserved

```
~ → cd /root
~ → ls
Dockerfile-mysql      Dockerfile-ubuntu    app
Dockerfile-python     Dockerfile-wordpress
~ →
```

studio.kodekloud.com/labs/docker/docker_cmd_entrypoint

Back to Domain Docker CMD & Entrypoint Learn the difference between CMD and ENTRYPOINT in Dockerfiles. Intermediate 60-90 min

2/6

What is the `ENTRYPOINT` configured on the `mysql` image?

mysql

docker-entrypoint.sh

/usr/local/bin

NO ENTRYPOINT CONFIGURED

```
# the "/var/lib/mysql" stuff here is because the mysql-server postinst doesn't have an explicit way to disable the mysql_install_db codepath besides having a database already "configured" (ie, stuff in /var/lib/mysql/mysql)
# also, we set debconf keys to make APT a little quieter
RUN { \
    echo mysql-community-server mysql-community-server/data-dir select ''; \
    echo mysql-community-server mysql-community-server/root-pass password ''; \
    echo mysql-community-server mysql-community-server/re-root-pass password ''; \
    echo mysql-community-server mysql-community-server/remove-test-db select false; \
} | debconf-set-selections \
&& apt-get update && apt-get install -y mysql-community-client="${MYSQL_VERSION}" mysql-community-server-core="${MYSQL_VERSION}" && rm -rf /var/lib/apt/lists/* \
&& rm -rf /var/lib/mysql && mkdir -p /var/lib/mysql /var/run/mysqld \
&& chown -R mysql:mysql /var/lib/mysql /var/run/mysqld \
# ensure that /var/run/mysqld (used for socket and lock files) is writable regardless of the UID our mysqld instance ends up having at runtime
&& chmod 777 /var/run/mysqld

VOLUME /var/lib/mysql
# Config files
COPY config/ /etc/mysql/
COPY docker-entrypoint.sh /usr/local/bin/
RUN ln -s /usr/local/bin/docker-entrypoint.sh /entrypoint.sh # backwards compat
ENTRYPOINT ["docker-entrypoint.sh"]

EXPOSE 3306 33060
CMD ["mysqld"]
~ →
```

Back to Domain

Docker CMD & Entrypoint

Learn the difference between CMD and ENTRYPOINT in Dockerfiles.

Intermediate

60-90 min

Task

Hint

Solution

AI Assistant (Beta)

28:32

Terminal 1

+

Stop Lab

3 / 6

Next →

What is the `CMD` configured on the `wordpress` image?

wordpress

docker-entrypoint.sh

apache2-foreground

```
~ → cat Dockerfile-wordpress | grep CMD
CMD ["apache2-foreground"]

~ →
```

Windows Taskbar

03:27 AM

Back to Domain

Docker CMD & Entrypoint

Learn the difference between CMD and ENTRYPOINT in Dockerfiles.

Intermediate

60-90 min

Task

Hint

Solution

AI Assistant (Beta)

28:32

Terminal 1

+

Stop Lab

4 / 6

Next →

What is the final command run at startup when the `wordpress` image is run. Consider both `ENTRYPOINT` and `CMD` instructions

apache2-foreground

docker-entrypoint.sh

docker-entrypoint.sh apache2-foreground

docker-entrypoint.sh wordpress

wordpress

```
    echo 'display_errors = Off'; \
    echo 'display_startup_errors = Off'; \
    echo 'log_errors = On'; \
    echo 'error_log = /dev/stderr'; \
    echo 'log_errors_max_len = 1024'; \
    echo 'ignore_repeated_errors = On'; \
    echo 'ignore_repeated_source = Off'; \
    echo 'html_errors = Off'; \
} > /usr/local/etc/php/conf.d/error-logging.ini

RUN a2enmod rewrite expires

VOLUME /var/www/html

ENV WORDPRESS_VERSION 5.2.2
ENV WORDPRESS_SHA1 3605bcbe9ea48d714efa59b0eb2d251657e7d5b0

RUN set -ex; \
    curl -o wordpress.tar.gz -fSL "https://wordpress.org/wordpress-${WORDPRESS_VERSION}.tar.gz"; \
    echo "${WORDPRESS_SHA1} *wordpress.tar.gz" | sha1sum -c -; \
    # upstream tarballs include ./wordpress/ so this gives us /usr/src/wordpress
    tar -xzf wordpress.tar.gz -C /usr/src/; \
    rm wordpress.tar.gz; \
    chown -R www-data:www-data /usr/src/wordpress

COPY docker-entrypoint.sh /usr/local/bin/

ENTRYPOINT ["docker-entrypoint.sh"]
CMD ["apache2-foreground"]

~ →
```

Windows Taskbar

03:29 AM

Back to Domain

Docker CMD & Entrypoint

Learn the difference between CMD and ENTRYPOINT in Dockerfiles.

Intermediate

60-90 min

Task

Hint

Solution

AI Assistant (Beta)

24:11

Next →

5 / 6

What is the command run at startup when the `ubuntu` image is run?

entrypoint bash

/root bash

bash

bash ubuntu

ubuntu

Terminal 1

Stop Lab

```
# https://github.com/dockerfile/ubuntu
#
# Pull base image.
FROM ubuntu:14.04

# Install.
RUN \
sed -i 's/# \(.multiverse$\)/\1g' /etc/apt/sources.list && \
apt-get update && \
apt-get -y upgrade && \
apt-get install -y build-essential && \
apt-get install -y software-properties-common && \
apt-get install -y byobu curl git htop man unzip vim wget && \
rm -rf /var/lib/apt/lists/*

# Add files.
ADD root/.bashrc /root/.bashrc
ADD root/.gitconfig /root/.gitconfig
ADD root/.scripts /root/.scripts

# Set environment variables.
ENV HOME /root

# Define working directory.
WORKDIR /root

# Define default command.
CMD ["bash"]
```

03:31 AM

Back to Domain

Docker CMD & Entrypoint

Learn the difference between CMD and ENTRYPOINT in Dockerfiles.

Intermediate

60-90 min

Task

Hint

Solution

AI Assistant (Beta)

6 / 6

Next →

Run an instance of the `ubuntu` image to run the `sleep 1000` command at startup.

Run it in detached mode.

Check

Next →

✔ Ubuntu container run with sleep 1000 command

Terminal 1

```
~ → ls
Dockerfile-mysql      Dockerfile-ubuntu    app
Dockerfile-python     Dockerfile-wordpress

~ → docker run -d ubuntu sleep 1000
f15c230758a620e3be1276f2ea563492b647cdb0b89aa6b49dd0d657d589287d

~ →
```

03:42 AM

KodeFlix Originals

studio.kodekloud.com/labs/docker/docker_cmd_entrypoint

Back to Domain

Docker CMD & Entrypoint

Learn the difference between CMD and ENTRYPOINT in Dockerfiles.

Intermediate

60-90 min

CONGRATULATIONS!!!!

You have successfully completed the challenge.

End lab session

```
~ → ls
Dockerfile-mysql      Dockerfile-ubuntu  app
Dockerfile-python     Dockerfile-wordpress

~ → docker run -d ubuntu sleep 1000
f15c230758a620e3be1276f2ea563492b647cdb0b89aa6b49dd0d657d589287d

~ →
```

Windows Taskbar

System Tray