Exercise Worksheet

[www.vomtom.at](http://www.vomtom.at)

# From the Course: Understanding Docker Run, Dockerfile, Docker-Compose for Beginners

## Working with Servers, Logs and Port forwarding in Docker

In this example we are starting an apache webserver hosting a single file

docker run -d httpd

* Will start an apache in detached mode (-d)
* It should open a webserver on port 80

Open <http://localhost:80>

* That doesn’t do anything
* But is the Web-Server really running?

docker exec -it container\_identifier /bin/bash

* You get an interactive shell inside the container

apt-get update && apt-get install curl

curl localhost:80

* Should bring up a “it works” message, which means the webserver is running
* But why can’t we see it on the host?

exit

* Exit the interactive shell

docker logs container\_identifier

* This will give you the log output of the container
* You even see the request from *inside* the container

docker logs container\_identifier -f

* Will follow the log output until you hit ctrl+c
* Localhost:80 doesn’t do anything

docker inspect container\_identifier

* Will print out the container information
* You see there are no ports bound to the host

docker rm -f container\_identifier

* Stop and remove the container

docker ps -a

* Should be empty

docker run -d -p 8080:80 httpd

* -p 8080:80 forwards HOST:GUEST
* On the host machine port 8080 is now mapped to port 80 in the guest machine

Open <http://localhost:8080>

* Should bring up now “it works”

docker inspect container\_identifier

* Now shows the forwarded port

docker rm -f container\_identifier

* Should stop and remove the container again

<http://localhost:8080>

* Is again unreachable, because the server stopped

docker run -d -p 8080:80 -v ${PWD}:/var/www/html php:7.2-apache

* Maps the current directory into /var/www/html, which is the document-root for apache
* If you still have the index.php there it will now be served on <http://localhost:8080>

docker rm -f container\_identifier

* Let’s remove the container