Quickstart: Compose and WordPress

Estimated reading time: 3 minutes

You can use Docker Compose to easily run WordPress in an isolated environment built with Docker containers. This quick-start guide demonstrates how to use Compose to set up and run WordPress. Before starting, make sure you have Compose installed (https://docs.docker.com/compose/install/).

Define the project

1. Create an empty project directory.

You can name the directory something easy for you to remember. This directory is the context for your application image. The directory should only contain resources to build that image.

This project directory contains a docker-compose.yml file which is complete in itself for a good starter wordpress project.

Tip: You can use either a .yml or .yaml extension for this file. They both work.

2. Change into your project directory.

For example, if you named your directory my_wordpress:

```
cd my wordpress/
```

3. Create a docker-compose.yml file that starts your WordPress blog and a separate MySQL instance with a volume mount for data persistence:

```
version: '3.3'
services:
   db:
     image: mysql:5.7
     volumes:
       - db_data:/var/lib/mysql
     restart: always
     environment:
       MYSQL ROOT PASSWORD: somewordpress
       MYSQL_DATABASE: wordpress
       MYSQL USER: wordpress
       MYSQL PASSWORD: wordpress
   wordpress:
     depends on:
       - db
     image: wordpress:latest
     ports:
       - "8000:80"
     restart: always
     environment:
       WORDPRESS DB HOST: db:3306
       WORDPRESS DB USER: wordpress
       WORDPRESS DB PASSWORD: wordpress
       WORDPRESS DB NAME: wordpress
volumes:
    db data: {}
```

Notes:

- The docker volume db_data persists any updates made by WordPress to the database. Learn more about docker volumes (https://docs.docker.com/engine/admin/volumes/volumes/)
- WordPress Multisite works only on ports 80 and 443.

Build the project

Now, run docker-compose up -d from your project directory.

This runs docker-compose up (https://docs.docker.com/compose/reference/up/) in detached mode, pulls the needed Docker images, and starts the wordpress and database containers, as shown in the example below.

```
$ docker-compose up -d
Creating network "my_wordpress_default" with the default driver
Pulling db (mysql:5.7)...
5.7: Pulling from library/mysql
efd26ecc9548: Pull complete
a3ed95caeb02: Pull complete
Digest: sha256:34a0aca88e85f2efa5edff1cea77cf5d3147ad93545dbec99cfe705b03c520de
Status: Downloaded newer image for mysql:5.7
Pulling wordpress (wordpress:latest)...
latest: Pulling from library/wordpress
efd26ecc9548: Already exists
a3ed95caeb02: Pull complete
589a9d9a7c64: Pull complete
Digest: sha256:ed28506ae44d5def89075fd5c01456610cd6c64006addfe5210b8c675881aff6
Status: Downloaded newer image for wordpress:latest
Creating my_wordpress_db_1
Creating my_wordpress_wordpress_1
```

Note: WordPress Multisite works only on ports 80 and/or 443 . If you get an error message about binding 0.0.0.0 to port 80 or 443 (depending on which one you specified), it is likely that the port you configured for WordPress is already in use by another service.

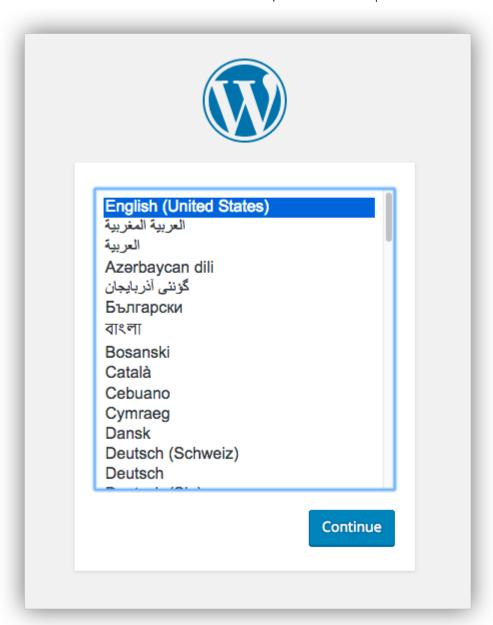
Bring up WordPress in a web browser

At this point, WordPress should be running on port 8000 of your Docker Host, and you can complete the "famous five-minute installation" as a WordPress administrator.

Note: The WordPress site is not immediately available on port 8000 because the containers are still being initialized and may take a couple of minutes before the first load.

If you are using Docker Machine (https://docs.docker.com/machine/), you can run the command docker-machine ip MACHINE_VM to get the machine address, and then open http://MACHINE_VM_IP:8000 in a web browser.

If you are using Docker Desktop for Mac or Docker Desktop for Windows, you can use http://localhost as the IP address, and open http://localhost:8000 in a web browser.





Shutdown and cleanup

The command docker-compose down (https://docs.docker.com/compose/reference/down/) removes the containers and default network, but preserves your WordPress database.

The command docker-compose down --volumes removes the containers, default network, and the WordPress database.

More Compose documentation

- User guide (https://docs.docker.com/compose/)
- Installing Compose (https://docs.docker.com/compose/install/)
- Getting Started (https://docs.docker.com/compose/gettingstarted/)
- Get started with Django (https://docs.docker.com/compose/django/)
- Get started with Rails (https://docs.docker.com/compose/rails/)
- Command line reference (https://docs.docker.com/compose/reference/)

• Compose file reference (https://docs.docker.com/compose/compose-file/)

documentation (https://docs.docker.com/glossary/?term=documentation), docs (https://docs.docker.com/glossary/?term=docs), docker (https://docs.docker.com/glossary/?term=docker), compose (https://docs.docker.com/glossary/?term=compose), orchestration (https://docs.docker.com/glossary/?term=orchestration), containers (https://docs.docker.com/glossary/?term=containers)