



Zachodniopomorski
Uniwersytet Technologiczny
w Szczecinie

Network Systems Administration
Report 9 – Joomla with Docker

dr inż. Piotr Lech

Abdurrahman Karaoluk
ka46312

1. Joomla Installation on Docker

Step-1: Download Joomla to Docker

```
sudo docker pull joomla
```

Step-2: Delete contents in Docker

```
sudo docker rm -f $(docker ps -aq)
```

Step-3: Make required Mysql database configurations in Docker

```
sudo docker run --name joomla_db -d -e  
MYSQL_ROOT_PASSWORD= test mysql
```

Step-4: Make required Joomla database configurations in Docker

```
sudo docker run --name joomla_website --link joomla_db:mysql -d -p  
8080:80 joomla
```

Step-5: Be sure to view and install the Docker content

```
sudo docker ps
```

2. Screenshots

```
root@osboxes: -  
osboxes@osboxes:~$ sudo docker search joomla  
NAME                DESCRIPTION                STARS     OFFICIAL   AUTOMATED  
joomla              Joomla! is an open source content management... 275       [OK]  
bitnami/joomla      Bitnami Docker Image for Joomla! 17        [OK]  
joomlaprojects/docker-systemtests Systemtests for Joomla! 3        [OK]  
seterrrychen/joomla-without-database Dockerize Joomla 3        [OK]  
linuxconfig/joomla Joomla content management system (CMS) 2        [OK]  
buyanov/joomla-php5.6-fpm PHP 5.6 FPM container with Joomla 3.4.3 2        [OK]  
joomlaprojects/docker-images Different PHP versions that Joomla supports... 1  
dell/joomla         An open source content management system. 1  
lansaworld/joomla-nginx joomla-nginx 1  
acdatic4v/joomla-apache2-mod-php5 Extends the official Joomla with Apache PHP ... 1  
joomlaprojects/docker-phpcs Code style check for joomla 1  
arm32v7/joomla      Joomla! is an open source content management... 0  
arm64v8/joomla      Joomla! is an open source content management... 0  
trollin/joomla      Joomla! is an open source content management... 0  
xoro7/joomla        Joomla test 0  
mlps64le/joomla     Joomla! is an open source content management... 0  
i386/joomla         Joomla! is an open source content management... 0  
ppc64le/joomla      Joomla! is an open source content management... 0  
i386con/joomla-ppc64le Joomla! is an open source content management... 0  
arm32v6/joomla      Joomla! is an open source content management... 0  
s390x/joomla        Joomla! is an open source content management... 0  
amd64/joomla        Joomla! is an open source content management... 0  
arm32v5/joomla      Joomla! is an open source content management... 0  
3d8gital/joomla-apache Joomla PHP 5.5 0  
edhongcy/joomla-without-database Dockerize Joomla 0
```

Şekil 1. Contents of the Joomla in Docker

```
root@osboxes: -  
osboxes@osboxes:~$ sudo docker pull joomla  
Using default tag: latest  
latest: Pulling from library/joomla  
8559a31e96f4: Pull complete  
e0276193a084: Pull complete  
eb2d00c10344: Pull complete  
f54006e0dc29: Pull complete  
e0d3d1244592: Pull complete  
3a60f364b0c5: Pull complete  
3e309988c00b: Pull complete  
bfff5c52e95f4: Pull complete  
c9808065e896: Pull complete  
f07bb8dcc770: Pull complete  
7ad826bc3623: Pull complete  
0f6a0743d973: Pull complete  
43b190adf511: Pull complete  
cc02e4c247ac: Pull complete  
2982fed812bd: Pull complete  
cd4ed60617dd: Pull complete  
4d38c768bf40: Pull complete  
e764d52e2497: Pull complete  
0bdaf0e5cbe: Pull complete  
Digest: sha256:389f20622c3bdde87a8be64678c9a407da0e0cdf3375fcb1b6fb79d4b4122cd  
Status: Downloaded newer image for joomla:latest  
docker.io/library/joomla:latest  
osboxes@osboxes:~$ sudo docker ps -a  
CONTAINER ID        IMAGE               NAMES             COMMAND                  CREATED        STATUS        PORTS  
e64ca01b4f3b       sequence/static-site /bin/sh -c 'cd /usr... 9 days ago    Exited (255) 17 minutes ago    0.0.0.0:32768->80/tcp  
0.0.0.0:32768->443/tcp competent_pare  
1e23c5fba07        hello-world        "/hello"          9 days ago    Exited (0) 9 days ago
```

Şekil 2. Installing Joomla on Docker

```
root@osboxes: ~
osboxes@osboxes:~$ su
Password:
root@osboxes:/home/osboxes# docker rm -f $(docker ps -aq)
e64ca01b4f3b
1e23cb5fba07
root@osboxes:/home/osboxes# cd
root@osboxes:~# docker rm -f $(docker ps -aq)
"docker rm" requires at least 1 argument.
See 'docker rm --help'.

Usage:  docker rm [OPTIONS] CONTAINER [CONTAINER...]

Remove one or more containers
root@osboxes:~# docker ps -a
CONTAINER ID        IMAGE               COMMAND             CREATED             STATUS              PORTS              NAMES
root@osboxes:~# docker images
REPOSITORY          TAG                 IMAGE ID            CREATED             SIZE
joomla              latest             82359700ca70       7 days ago         458MB
hello-world         latest             bf756fb1ae65       5 months ago       13.3kB
sequence/static-site latest             f589ccde7957       4 years ago        191MB
root@osboxes:~# docker run --name joomla_db -d -e MYSQL_ROOT_PASSWORD=test mysql
Unable to find image 'mysql:latest' locally
latest: Pulling from library/mysql
8559a31e96f4: Already exists
d51ce1c2e575: Pull complete
c2344adc4858: Pull complete
fcf3ceff18fc: Pull complete
16da0c38dc5b: Pull complete
b905d1797e97: Pull complete
4b50d1c6b05c: Pull complete
c75914a65ca2: Pull complete
1ae8042bdd09: Pull complete
453ac13c00a3: Pull complete
9e680cd72f08: Pull complete
a6b5dc864b6c: Pull complete
Digest: sha256:8b7b328a7ff6de46ef96bcf83af048cb0a1c86282bfca0cb119c84568b4c4f6
Status: Downloaded newer image for mysql:latest
fe397eac1b21e5d0b80a7e889f19232be30e8e47462bbb4a274567f56159
root@osboxes:~# docker ps
CONTAINER ID        IMAGE               COMMAND             CREATED             STATUS              PORTS              NAMES
fe397eac1b2        mysql              "docker-entrypoint.s..." 15 seconds ago     Up 9 seconds       3306/tcp, 33060/tcp joomla_db
```

Şekil 3. Cleaning the Docker inside and configuring Mysql

```
2020-06-19 14:51:25+00:00 [Note] [Entrypoint]: MySQL init process done. Ready for start up.

2020-06-19T14:51:26.981698Z 0 [Warning] [MY-011070] [Server] 'Disabling symbolic links using --skip-symbolic-links (or equivalent) is the default. Consider not using this option as it is deprecated and will be removed in a future release.
2020-06-19T14:51:26.982106Z 0 [System] [MY-010116] [Server] /usr/sbin/mysqld (mysqld 8.0.20) starting as process 1
2020-06-19T14:51:27.072068Z 1 [System] [MY-013576] [InnoDB] InnoDB initialization has started.
2020-06-19T14:51:28.433442Z 1 [System] [MY-013577] [InnoDB] InnoDB initialization has ended.
2020-06-19T14:51:29.383754Z 0 [System] [MY-011323] [Server] X Plugin ready for connections. Socket: '/var/run/mysqld/mysqld.sock' bind-address: '::' port: 3306
2020-06-19T14:51:30.522890Z 0 [Warning] [MY-010068] [Server] CA certificate ca.pem is self signed.
2020-06-19T14:51:30.601700Z 0 [Warning] [MY-011810] [Server] Insecure configuration for --pid-file: Location '/var/run/mysqld' in the path is accessible to all OS users. Consider choosing a different directory.
2020-06-19T14:51:31.052815Z 0 [System] [MY-010931] [Server] /usr/sbin/mysqld: ready for connections. Version: '8.0.20' socket: '/var/run/mysqld/mysqld.sock' port: 3306 MySQL Community Server - GPL.
root@osboxes:~# docker run --name joomla_website --link joomla_db:mysql -d -p 8080:80 joomla
81368dce7da554ddb1ac27c6f428dddfde7c6b4ade9dc020d31a0638a23951fe
root@osboxes:~# docker ps
CONTAINER ID        IMAGE               COMMAND             CREATED             STATUS              PORTS              NAMES
81368dce7da5        joomla             "/entrypoint.sh apac..." 18 seconds ago     Up 10 seconds       0.0.0.0:8080->80/tcp joomla_webs
lte
fe397eac1b2        mysql              "docker-entrypoint.s..." 3 minutes ago     Up 3 minutes       3306/tcp, 33060/tcp joomla_db
```

Şekil 4. Configuring Joomla

1 Configuration

2 Database

3 Overview

Select LanguageEnglish (United States)Next

Main Configuration

Site Name *

Enter the name of your Joomla! site.

Administrator Email *

Enter an email address. This will be the email address of the website Super User.

Description

Enter a description of the overall website that is to be used by search engines. Generally, a maximum of 20 words is optimal.

Administrator Username *

Set the username for your Super User account.

Administrator Password *

Set the password for your Super User account and confirm it in the field below.

Confirm Administrator Password *

Şekil 5. Configuring Joomla from localhost:8080

1 Configuration
2 Database
3 Overview

Database Configuration

Previous
Next

Database Type *
MySQL
This is probably "MySQL".

Host Name *
localhost
This is usually "localhost" or a name provided by your host.

Username *
root
Either a username you created or a username provided by your host.

Password

For site security using a password for the database account is mandatory.

Database Name *
joomla
Some hosts allow only a certain DB name per site. Use table prefix in this case for distinct Joomla! sites.

Table Prefix *
m2uha_

Şekil 6. Configuring Joomla database from localhost:8080

1 Configuration
2 Database
3 Overview


Finalization

Install Sample Data
None (Required for basic native multilingual site creation)
Blog English (GB) Sample Data
Brochure English (GB) Sample Data
Default English (GB) Sample Data
Learn Joomla English (GB) Sample Data

Installing sample data is strongly recommended for beginners.
This will install sample content that is included in the Joomla! installation package.

Şekil 7. Configuring Joomla overview from localhost:8080

Home
Sample Sites
Joomla.org



Hello Docker

Joomla!

Congratulations! You have a Joomla site! Joomla makes it easy to build a website just the way you want it and keep it simple to update and maintain.

Joomla is a flexible and powerful platform, whether you are building a small site for yourself or a huge site with hundreds of thousands of visitors. Joomla is open source, which means you can make it work just the way you want it to.

The content in this installation of Joomla has been designed to give you an in depth tour of Joomla's features.

Beginners

If this is your first Joomla! site or your first website, you have come to the right place. Joomla will help you get your website up and running quickly and easily.

Start off using your site by logging in using the administrator account you created when you installed Joomla.

Upgraders

If you are an experienced Joomla! user, this Joomla site will seem very familiar but also very different. The biggest change is the new administrator interface and the adoption of responsive design. Hundreds of other improvements have been made.

Professionals

Joomla! 3 continues development of the Joomla Platform and CMS as a powerful and flexible way to bring your vision of the web to reality. With the new administrator interface and adoption of Twitter Bootstrap, the ability to control its look and the management of extensions is now complete.

Şekil 8. Joomla website after configurations