

## **Exercise 12**

### **Using Podman Compose**

#### **Q1.**

You are to use Podman Compose to launch a working Database + Wordpress Website.

For MySQL —

You will have to define the following environment variables:

- **MYSQL\_ROOT\_PASSWORD=**
- **MYSQL\_DATABASE=**
- **MYSQL\_USER=**
- **MYSQL\_PASSWORD=**

For WordPress —

You will have to define the following environment variables:

- **WORDPRESS\_DB\_HOST=**
- **WORDPRESS\_DB\_USER=**
- **WORDPRESS\_DB\_PASSWORD=**
- **WORDPRESS\_DB\_NAME=**

After initiating the Podman Compose, if we open Firefox and type “localhost” in the search bar it should open the WordPress Login page. Here you can create your account by providing the asked information and you will be then greeted with the WordPress Dashboard.

Once confirmed, you have to remove the whole Podman Compose file from execution.

## **Solutions**

### **Q1.**

```
[root@localhost ~]# dnf install python3-pip
Updating Subscription Management repositories.
Last metadata expiration check: 2:42:21 ago on Sunday 01 October 2023 12:51:09 AM.
Package python3-pip-21.2.3-6.el9.noarch is already installed.
Dependencies resolved.
Nothing to do.
Complete!
```

```
[root@localhost ~]# pip3 install podman-compose
Requirement already satisfied: podman-compose in /usr/local/lib/python3.9/site-packages (1.0.6)
Requirement already satisfied: pyyaml in /usr/lib64/python3.9/site-packages (from podman-compose) (5.4.1)
Requirement already satisfied: python-dotenv in /usr/local/lib/python3.9/site-packages (from podman-
compose) (1.0.0)
```

```
[root@localhost ~]# mkdir compose
[root@localhost ~]# cd compose/
[root@localhost compose]# vim compose.yaml
[root@localhost compose]#
```

```
---
```

```
services:
```

```
  db:
```

```
    image: mysql
```

```
    environment:
```

- MYSQL\_ROOT\_PASSWORD=somewordpress
- MYSQL\_DATABASE=wordpress
- MYSQL\_USER=wordpress
- MYSQL\_PASSWORD=wordpress

```
    expose:
```

- 3306

```
  wordpress:
```

```
    image: wordpress:latest
```

```
    ports:
```

- 80:80

```
    environment:
```

- WORDPRESS\_DB\_HOST=db
- WORDPRESS\_DB\_USER=wordpress
- WORDPRESS\_DB\_PASSWORD=wordpress
- WORDPRESS\_DB\_NAME=wordpress

```
[root@localhost compose]# podman-compose up -d
podman-compose version: 1.0.6
['podman', '--version', '']
using podman version: 4.4.1
** excluding: set()
['podman', 'ps', '--filter', 'label=io.podman.compose.project=compose', '-a', '--format', '{{ index
.Labels "io.podman.compose.config-hash"}}']
['podman', 'network', 'exists', 'compose_default']
['podman', 'network', 'create', '--label', 'io.podman.compose.project=compose', '--label', 'com.docker.compose.project=compose', 'compose_default']
['podman', 'network', 'exists', 'compose_default']
podman run --name=compose_db_1 -d --label io.podman.compose.config-hash=89b1086970d3d08583d29a47a9cc
1d21375ec8a67dd2b5f87f7bfc0f4b854a87 --label io.podman.compose.project=compose --label io.podman.com
pose.version=1.0.6 --label PODMAN_SYSTEMD_UNIT=podman-compose@compose.service --label com.docker.com
pose.project=compose --label com.docker.compose.project.working_dir=/root/compose --label com.docker.
compose.project.config_files=compose.yaml --label com.docker.compose.container-number=1 --label com.
docker.compose.service=db -e MYSQL_ROOT_PASSWORD=somewordpress -e MYSQL_DATABASE=wordpress -e MYSQL_
USER=wordpress -e MYSQL_PASSWORD=wordpress --net compose_default --network-alias db --expose 3306 m
```

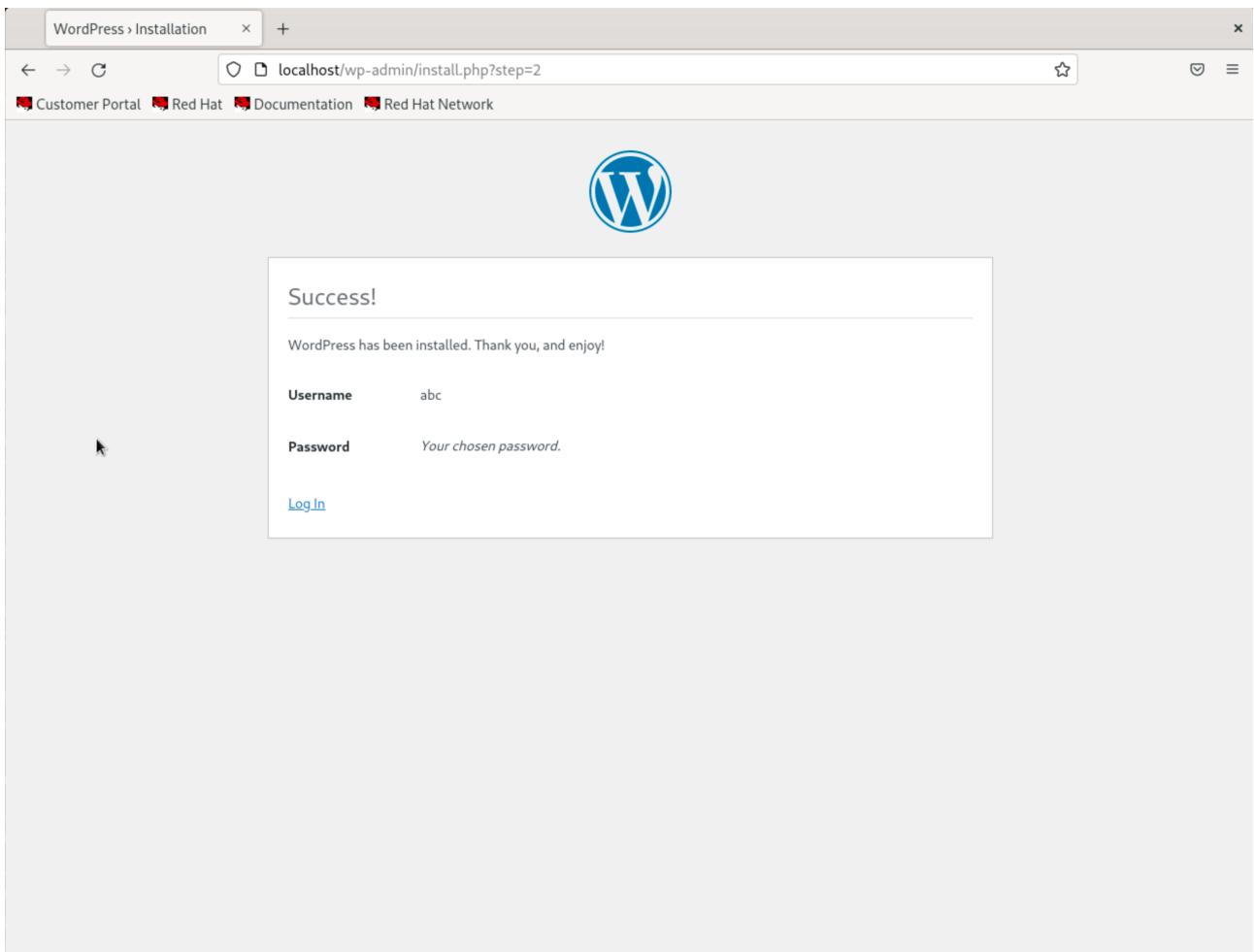
CONTAINER ID	IMAGE	COMMAND	CREATED	STATUS	PORTS
NAMES					
befddf748f16	docker.io/library/mysql:latest	mysqld	About a minute ago	Up About a minute	
compose_db_1					
4e1b2f3ca6b5	docker.io/library/wordpress:latest	apache2-foreground... >80/tcp	28 seconds ago	Up 29 seconds	0.0.0.0:80-
compose_wordpress_1					

Copying blob 5af  
Copying blob 1db  
Copying blob 1cd  
Copying blob 7d3  
Copying blob 107  
Copying blob 099  
Copying blob bb2  
Copying blob 0b4  
Copying blob b18  
Copying blob 7a6  
Copying blob 133  
Copying blob 0e9  
Copying blob e0b  
Copying blob ac8  
Copying blob cba  
Copying blob 9d7  
Copying blob 713  
Copying config 5  
Writing manifest  
Storing signature  
4e1b2f3ca6b58bb2  
exit code: 0  
[root@localhost ~]#

CONTAINER ID IMAGE COMMAND CREATED STATUS PORTS  
NAMES  
befddf748f16 docker.io/library/mysql:latest mysqld About a minute ago Up About a minute  
compose\_db\_1  
4e1b2f3ca6b5 docker.io/library/wordpress:latest apache2-foreground... 28 seconds ago Up 29 seconds 0.0.0.0:80->80/tcp compose\_wordpress\_1

Copying blob 5af  
Copying blob 1db  
Copying blob 1cd  
Copying blob 7d3  
Copying blob 107  
Copying blob 099  
Copying blob bb2  
Copying blob 0b4  
Copying blob b18  
Copying blob 7a6  
Copying blob 133  
Copying blob 0e9  
Copying blob e0b  
Copying blob ac8  
Copying blob cba  
Copying blob 9d7  
Copying blob 713  
Copying config 5  
Writing manifest  
Storing signature  
4e1b2f3ca6b58bb2  
exit code: 0  
[root@localhost ~]#

CONTAINER ID IMAGE COMMAND CREATED STATUS PORTS  
NAMES  
befddf748f16 docker.io/library/mysql:latest mysqld About a minute ago Up About a minute  
compose\_db\_1  
4e1b2f3ca6b5 docker.io/library/wordpress:latest apache2-foreground... 28 seconds ago Up 29 seconds 0.0.0.0:80->80/tcp compose\_wordpress\_1



A screenshot of the WordPress dashboard titled "Dashboard < TRAINING — WP". The address bar shows "localhost/wp-admin/" and the title bar says "Howdy, abc". The dashboard sidebar includes links for Home, Updates (1), Posts, Media, Pages, Comments, Appearance, Plugins (1), Users, Tools, Settings, and a Collapse menu. The main content area features a large "Welcome to WordPress!" heading and a link to "Learn more about the 6.3.1 version.". Below this, there are three cards: "Author rich content with blocks and patterns" (with a "Add a new page" link), "Customize your entire site with block themes" (with a "Open site editor" link), and "Switch up your site's look & feel with Styles" (with a "Edit styles" link). At the bottom, there are several widgets: "Site Health Status" (No information yet...), "At a Glance" (1 Post, 1 Comment), "Quick Draft" (Title, Content, Save Draft button), and "WordPress Events and News". A dashed line indicates where new widgets can be dragged into the sidebar.

```
[root@localhost compose]# podman-compose down
podman-compose version: 1.0.6
['podman', '--version', '']
using podman version: 4.4.1
** excluding: set()
podman stop -t 10 compose_wordpress_1
compose_wordpress_1
exit code: 0
podman stop -t 10 compose_db_1
compose_db_1
exit code: 0
podman rm compose_wordpress_1
compose_wordpress_1
exit code: 0
podman rm compose_db_1
compose_db_1
exit code: 0
```