

Práctica de Docker: Creación de Imagen de Base de Datos Personalizada con Inicialización y Publicación en Docker Hub

1. Creación del Archivo docker-compose.yml

```
GNU nano 7.2
services:
  # Servicio 1: Base de Datos MariaDB
  db:
    image: mariadb:10.5
    container_name: mariadb_prod
    restart: always
    environment:
      - MYSQL_ROOT_PASSWORD=supersecret
      - MYSQL_DATABASE=wordpress_db
      - MYSQL_USER=wp_user
      - MYSQL_PASSWORD=wp_secret
    volumes:
      - data_mysql:/var/lib/mysql # persistencia de la base de datos

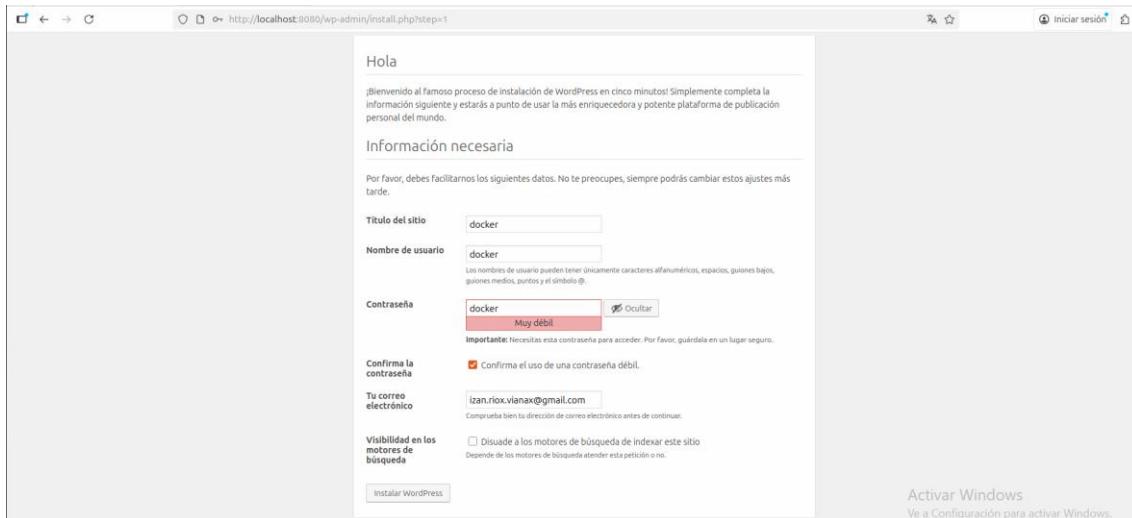
  # Servicio 2: Servidor Web WordPress
  web:
    image: wordpress:4.9.8
    container_name: wordpress_prod
    depends_on:
      - db
    restart: always
    ports:
      - "8080:80" # localhost:8080 -> contenedor:80
    environment:
      - WORDPRESS_DB_HOST=db
      - WORDPRESS_DB_USER=wp_user
      - WORDPRESS_DB_PASSWORD=wp_secret
      - WORDPRESS_DB_NAME=wordpress_db
    volumes:
      - ./app_data:/var/www/html # monta carpeta local
volumes:
  data_mysql: # volumen persistente para la base de datos
```

2. Ejecución y Ciclo de Vida

1. Levantar el entorno:

```
alumno@alumno-VirtualBox: /wordpress-compose$ docker compose up -d
WARN[0000] /home/alumno/wordpress-compose/docker-compose.yml: the attribute 'version' is obsolete, it will be ignored, please remove it to avoid potential confusion
:[1] Running 29/29
✓ db Pulled
✓ 13b7e930469f Already exists
✓ 89597121fd7d Already exists
✓ 7cc5d0769ced Already exists
✓ 27866cd1d4de Already exists
✓ 8400cc7c12c Already exists
✓ a9dc9a9ad4602 Already exists
✓ 42d16e8a68bf Already exists
✓ 25cb3c8ccdf5 Already exists
✓ web Pulled
✓ a5af2f73cd8 Pull complete
✓ 633e01cd2d3 Pull complete
✓ fcdff7f118ba Pull complete
✓ 4e7dc76b1769 Pull complete
✓ c425447c8835 Pull complete
✓ 757009709977 Pull complete
✓ 33ed5130e08 Pull complete
✓ 7c457706eb7a Pull complete
✓ e1558760eb7a Pull complete
✓ d02e3946a5 Pull complete
✓ a38c2fd4f450 Pull complete
✓ 09f70391740a Pull complete
✓ df1d46358537 Pull complete
✓ 9bd05695ec42 Pull complete
✓ 7abec1f0479 Pull complete
✓ bdb1ff7737fb Pull complete
✓ da52452806256 Pull complete
✓ e859088a7c7e Pull complete
✓ e5e7ecd1752b Pull complete
:[1] Running 29/29
✓ Network wordpress-compose_default Created
✓ Volume wordpress-compose_data_mysql Created
✓ Container mariadb_prod Started
✓ Container wordpress_prod Started
```

Activar Windows
Vea la Configuración para más



2. Verificar estado y logs:

```
alumno@alumno-VirtualBox:~/wordpress-compose$ docker compose ps # Muestra solo los servicios definidos en el archivo
docker compose logs -ft # Muestra logs multiplexados en tiempo real
WARN[0000] /home/alumno/wordpress-compose/docker-compose.yml: the attribute `version` is obsolete, it will be ignored, please remove it to avoid potential confusion
NAME           IMAGE          COMMAND            SERVICE      CREATED        STATUS       PORTS
mariadb_prod   mariadb:10.5   "docker-entrypoint.s..." db          4 minutes ago Up 4 minutes  3306/tcp
wordpress_prod  wordpress:4.9.8  "docker-entrypoint.s..." web         4 minutes ago Up 4 minutes  0.0.0.0:8080->80/tcp
WARN[0000] /home/alumno/wordpress-compose/docker-compose.yml: the attribute `version` is obsolete, it will be ignored, please remove it to avoid potential confusion
mariadb_prod | 2025-11-07T17:40:13.40684931Z 2025-11-07 17:40:13+00:00 [Note] [Entrypoint]: Entrypoint script for MariaDB
mariadb_prod | 2025-11-07T17:40:14.120100407Z 2025-11-07 17:40:14+00:00 [Note] [Entrypoint]: Starting mysqld daemon with databases from /var/lib/mysql
```

3. Acceso a la Shell

```
alumno@alumno-VirtualBox:~/wordpress-compose$ docker compose exec web /bin/bash
WARN[0000] /home/alumno/wordpress-compose/docker-compose.yml: the attribute `version` is obsolete, it will be ignored, please remove it to avoid potential confusion
root@7684b0004e3:/var/www/html# ls
```

4. Detención y Eliminación

```
alumno@alumno-VirtualBox:~/wordpress-compose$ docker compose down
WARN[0000] /home/alumno/wordpress-compose/docker-compose.yml: the attribute `version` is obsolete, it will be ignored, please remove it to avoid potential confusion
[+] Stopped 3 services
✓ Container wordpress_prod    Removed
✓ Container mariadb_prod     Removed
✓ Network wordpress-compose_default Removed
```