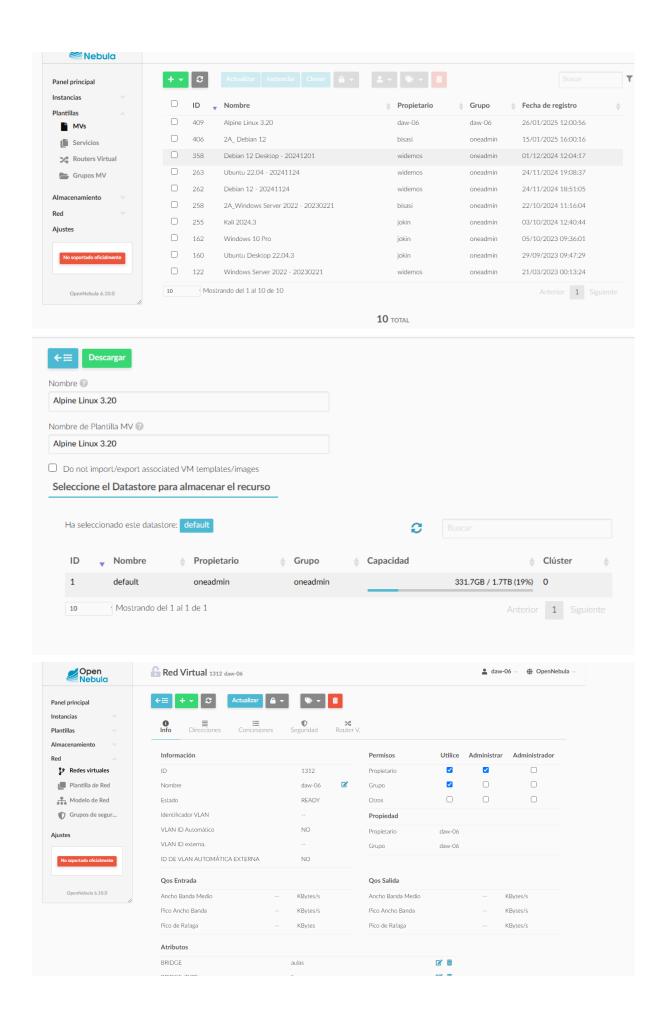
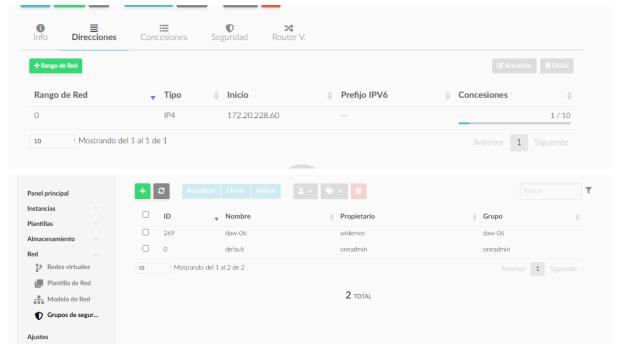


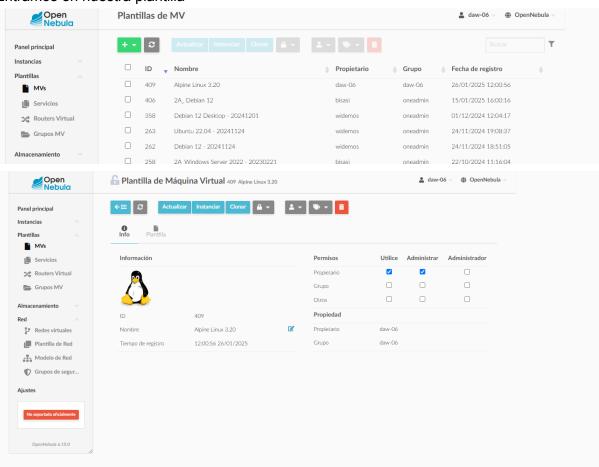
Click en la nube:







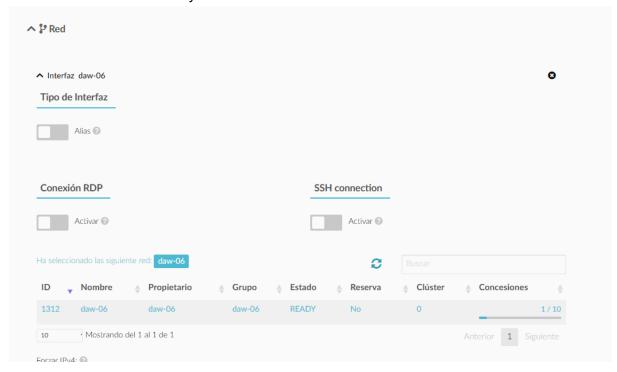
Entramos en nuestra plantilla



Le damos a instanciar



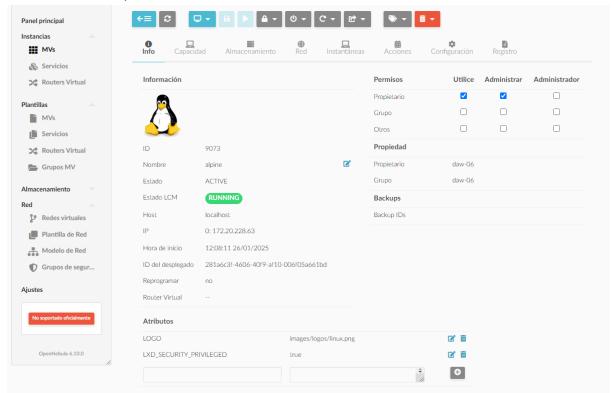
Seleccionamos nuestra red y le damos a instanciar:





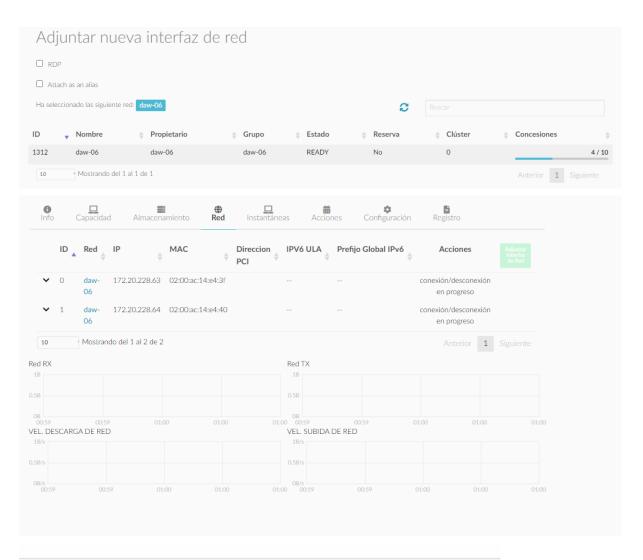


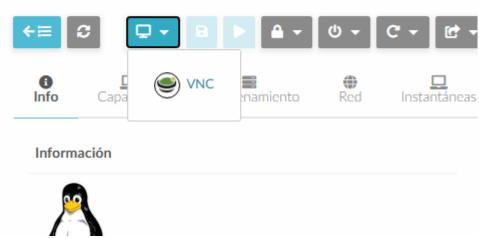
Entramos en cualquiera

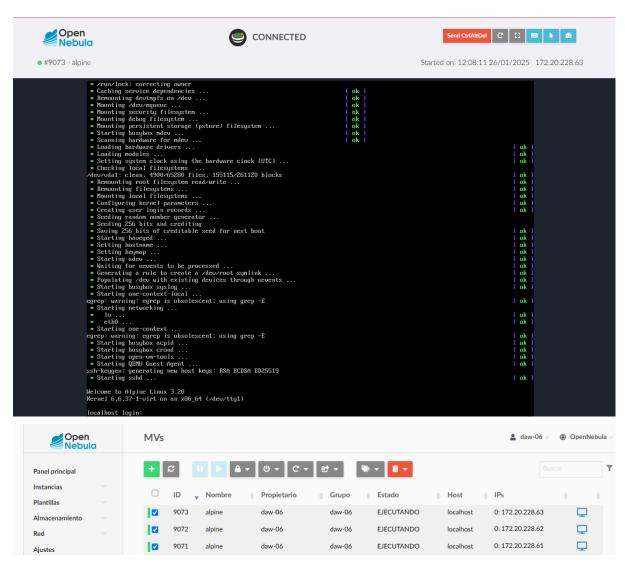


Le damos a adjuntar interfaz de red:





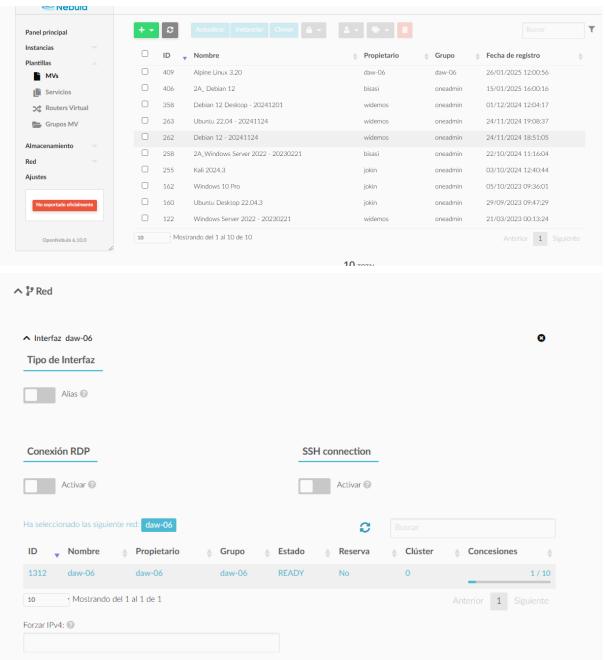




Al darle a la papelera y a terminar se borraran las seleccionadas



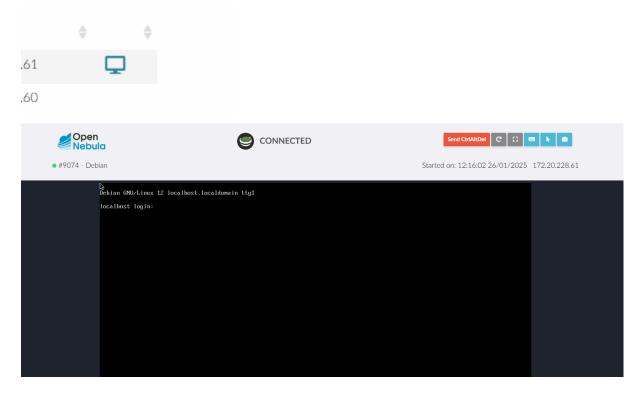
Entramos en debian12



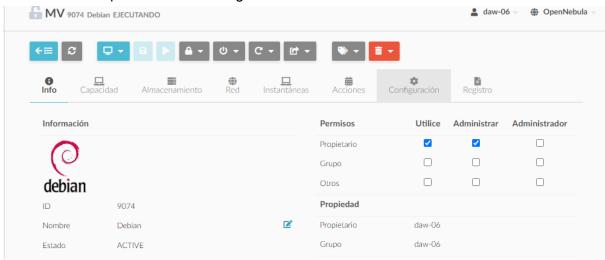
Y le damos a Instanciar



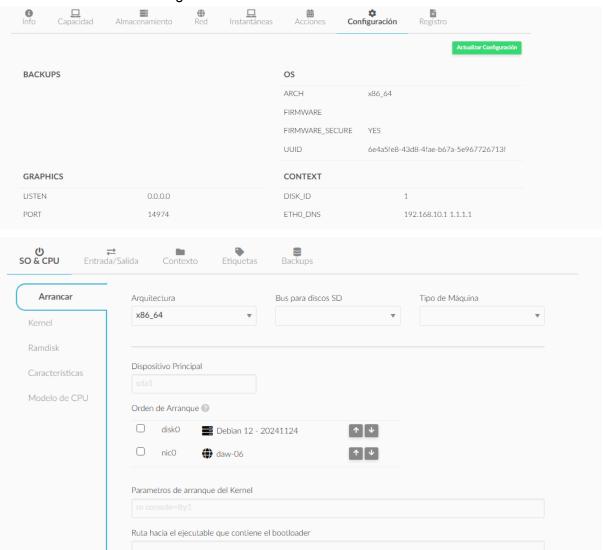
Le damos click a la pantalla de la derecha y nos lleva a la consola:



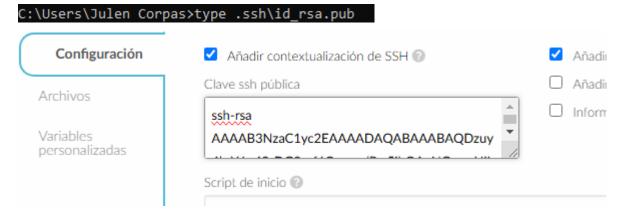
Dentro de la maquina vamos a configuración:

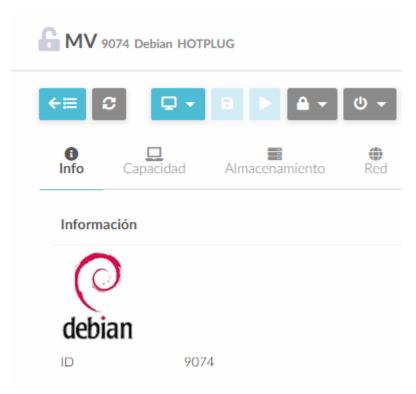


Le damos a actualizar configuración:



Ponemos este comando(Windows para obtener la clave pública)





Se pondrá en estado HOTPLUG



Después se pondrá en EJECUTANDO

El siguiente comando debería funcionar para entrar con ssh

```
C:\Users\2gdaw04>ssh root@172.20.228.43
Linux localhost.localdomain 6.1.0-30-amd64 #1 SMP PREEMPT_DYNAMIC Debian 6.1.124-1 (2025-01-12) x86_64

The programs included with the Debian GNU/Linux system are free software;
the exact distribution terms for each program are described in the
individual files in /usr/share/doc/*/copyright.

Debian GNU/Linux comes with ABSOLUTELY NO WARRANTY, to the extent
permitted by applicable law.
Last login: Tue Feb 4 09:39:14 2025 from 172.20.227.242
root@localhost:~# _
```

Se puede cambiar la clave publica desde el perfil en autorizacion:



Dentro del ssh se pondrían todos estos comandos:

```
(root@localhost:~# apt update && apt upgrade -y
Get:1 file:/etc/apt/mirrors/debian.list Mirrorlist [30 B]
Get:5 file:/etc/apt/mirrors/debian-security.list Mirrorlist [39 B]
Hit:2 https://deb.debian.org/debian bookworm InRelease
Get:3 https://deb.debian.org/debian bookworm-updates InRelease [55.4 kB]
Get:4 https://deb.debian.org/debian bookworm-backports InRelease [59.0 kB]
root@localhost:~# apt install git -y
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following package was automatically installed and is no longer required:
root@localhost:~# sudo apt-get update
curl
sudo install -m 0755 -d /etc/apt/keyrings
sudo curl -fsSL https://download.docker.com/linux/debian/gpg -o /etc/apt/keyrings/docker.asc
sudo chmod asudo apt-get install ca-certificates curl
sudo install -m 0755 -d /etc/apt/keyrings
sudo curl -fsSL https://download.docker.com/linux/debian/gpg -o /etc/apt/keyrings/docker.asc
Get:1 file:/etc/apt/mirrors/debian.list Mirrorlist [30 B]
```

sudo apt-get update

sudo apt-get install ca-certificates curl sudo install -m 0755 -d /etc/apt/keyrings sudo curl -fsSL https://download.docker.com/linux/debian/gpg -o /etc/apt/keyrings/docker.asc sudo chmod a+r /etc/apt/keyrings/docker.asc

```
root@localhost:~# echo \
    "deb [arch=$(dpkg --print-architecture) signed-by=/etc/apt/keyrings,
bian \
    $(. /etc/os-release && echo "$VERSION_CODENAME") stable" | \
    sudo tee /etc/apt/sources.list.d/docker.list > /dev/null
root@localhost:~# sudo apt-get update
Get:1 file:/etc/apt/mirrors/debian.list Mirrorlist [30 B]
```

echo \

"deb [arch=\$(dpkg --print-architecture) signed-by=/etc/apt/keyrings/docker.asc] https://download.docker.com/linux/debian \

\$(. /etc/os-release && echo "\$VERSION_CODENAME") stable" | \
sudo tee /etc/apt/sources.list.d/docker.list > /dev/null
sudo apt-get update

```
root@localhost:~# sudo mkdir -p /etc/apt/keyrings
root@localhost:~# curl -fsSL https://download.docker.com/linux/debian/gpg | sudo tee /etc/apt/keyrings/docker.asc > /dev/null
root@localhost:~# sudo apt-get update
Get:1 file:/etc/apt/mirrors/debian.list Mirrorlist [30 B]
Get:5 file:/etc/apt/mirrors/debian.ecurity.list Mirrorlist [39 B]
```

sudo mkdir -p /etc/apt/keyrings

curl -fsSL https://download.docker.com/linux/debian/gpg | sudo tee /etc/apt/keyrings/docker.asc > /dev/null sudo apt-get update

Después iría este y cuando pregunte le decis que si:

```
root@localhost:~# sudo apt-get install docker-ce docker-ce-cli containerd.io docker-buildx-plugin docker-compose-plugin
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
```

sudo apt-get install docker-ce docker-ce-cli containerd.io docker-buildx-plugin docker-compose-plugin

Para comprobar que está instalado:

```
root@localhost:~# docker ps
CONTAINER ID IMAGE COMMAND CREATED STATUS PORTS NAMES
root@localhost:~# docker run hello-world
Unable to find image 'hello-world:latest' locally
latest: Pulling from library/hello-world
e6590344b1a5: Pull complete
Digest: sha256:e0b569a5163a5e6be84e210a2587e7d447e08f87a0e90798363fa44a0464a1e8
Status: Downloaded newer image for hello-world:latest

Hello from Docker!
```

sudo docker run hello-world

En ikas OpenNebula entra en Github:blog y clona el repositorio con **root** (Como a mi no me deja conectarme pongo capturas de los comandos que utiliza):

Aquí clonaríamos nuestro repositorio:

```
fatal: destination path 'Reto3_equipo2' already exists and is not an empty directory.
root@localhost:~# ls
Reto3 equipo2
root@localhost:~# cd
ssh/
           Reto3 equipo2/
oot@localhost:~# cd Reto3 equipo2
root@localhost:~/Reto3 equipo2# ls
Base datos LICENSE README.md reto3 equipo2
root@localhost:~/Reto3 equipo2# apt install make
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following package was automatically installed and is no longer required:
root@localhost:~/Reto3_equipo2# mv reto3_equipo2 laravel
root@localhost:~/Reto3 equipo2# ls
Base datos LICENSE README.md docker laravel
Cambiar docker-compose.yml
  php:
     hostname: php
     build:
        context: ./php
        args:
            - PHP VERSION=${PHP VERSION}
            - ALPINE_VERSION=${ALPINE_VERSION}
     environment:
        - php.display errors=on
        - php.error_reporting=E_ALL
     volumes:
            ../laravel:/var/www/html/laravel_
     depends on:

    mariadb

         - redis
root@localhost:~/Reto3_equipo2# cd docker
root@localhost:~/Reto3_equipo2/docker# ls
Makefile docker-compose.override.yml docker-compose.yml docs env.example nginx php
root@localhost:~/Reto3 equipo2/docker# cp env.example .env
root@localhost:~/Reto3_equipo2/docker# nano .env
```

root@localhost:~# git clone -v https://github.com/Lorena-Arbe-Sanchez/Reto3_equipo2.git

```
GNU nano 7.2
                                                                         .env
# Versiones de los contenedores
PHP VERSION=8.2
ALPINE_VERSION=3.19
MARIADB VERSION=10.11
REDIS_VERSION=7.2
PHPMYADMIN_VERSION=latest
PHPREDISADMIN_VERSION=latest
NGINX_VERSION=mainline
HTTPS_PORTAL_VERSION=1
MYSQL_ROOT_PASSWORD=
MYSQL_DATABASE=reto3
MYSQL USER=root
MYSQL_PASSWORD=
COMPOSE_PROJECT_NAME=reto3
HTTPS_PORTAL_SITES=blog.test -> http://nginx:80, phpmyadmin.blog.test -> http://phpmyadmin:80,
HTTPS_PORTAL_STAGE=local
root@localhost:~/Reto3_equipo2/docker# ls
Makefile docker-compose.override.yml docker-compose.yml docs env.example nginx php
root@localhost:~/Reto3 equipo2/docker# make
Blog
Opciones:
build
start / stop / restart / stop-all
install
seed
workspace / workspace-root
test
redis-cli / redis-flush
stats
clean
oot@localhost:~/Reto3_equipo2/docker# make build
|ARN[0000] /root/Reto3_equipo2/docker/docker-compose.yml: the attribute `version` is obsolete, it will be ignored, pleas
remove it to avoid potential confusion
+] Building 0.9s (1/2)
                                                                                                        docker:default
   [php internal] load metadata for docker.io/library/php:8.2-fpm-alpine3.19
  Building 185.0s (14/27)
=> sha256:eda2dcd66a84fa63a604eb9eb09285f9be42854566c5dfd7fb3e8aed43c8b8ed 19.49kB / 19.49kB
=> extracting sha256:afe8bdc9352f0c00e7bfcf3195ff6477335848dd5f69a5484079f65d36107bc1
                                                                                                        docker:default
```

```
oot@localhost:~/blog/docker# make start
[+] Running 16/60
 .i mariadb [
                                    ] Pulling
                                                             1 Pulling
 .i phpmyadmin [
 : mailpit [ ] Pulling
 : https-portal [
                                                             ] Pulling
 oot@localhost:~/Reto3_equipo2/docker# make start
ARN[0000] /root/Reto3_equipo2/docker/docker-compose.yml: the attribute `version` is obsolete, it will be ignored, pleas
 remove it to avoid potential confusion
   Container reto3-redis-1
   Container reto3-mailpit-1
   Container reto3-mariadb-1
   Container reto3-phpmyadmin-1
   Container reto3-nginx-1
   Container reto3-php-1
   Container reto3-https-portal-1 Running
Blog
Sitios disponibles:
[Sitio web] https://blog.test
[phpMyAdmin] https://phpmyadmin.blog.test
[Mailpit] https://mailpit.blog.test
 oot@localhost:~/Reto3_equipo2/docker# _
root@localhost:~/Reto3 equipo2/docker# make workspace
 www-data@php:laravel$ ls
README.md
                                                                   package-lock.json
                       composer.json
                                                                                                                                       tailwind.config.js
                                 composer.lock
                                                                   package.json
                                                                                                     resources
                                                                                                                                       vite.config.js
artisan
                                                                   phpunit.xml
                                                                   postcss.config.js
bootstrap
                                                                                                     storage
 oot@localhost:~/Reto3_equipo2/docker# make install
 nstalling dependencies from lock file (including require-dev)
erifying lock file contents can be installed on current platform.
  /var/www/html/laravel/vendor does not exist and could not be created:
 nstall [--prefer-source] [--prefer-dist] [--prefer-install PREFER-INSTALL] [--dry-run] [--download-only] [--dev] [--n
uggest] [--no-dev] [--no-autoloader] [--no-progress] [--no-install] [--audit] [--audit-format AUDIT-FORMAT] [-v|vv|vv
-verbose] [-o|--optimize-autoloader] [-a|--classmap-authoritative] [--apcu-autoloader] [--apcu-autoloader-prefix APCU
HTOLOADER-PREFIX] [--ignore-platform-req IGNORE-PLATFORM-REQ] [--ignore-platform-reqs] [--] [<packages>...]
 oot@localhost:~/Reto3_equipo2/docker# mkdir ../laravel/vendor
oot@localhost:~/Reto3_equipo2/docker# make install
 nstalling dependencies from lock file (including require-dev)
erifying lock file contents can be installed on current platform.
   /var/www/html/laravel/vendor/doctrine does not exist and could not be created:
 nstall [--prefer-source] [--prefer-dist] [--prefer-install PREFER-INSTALL] [--dry-run] [--download-only] [--dev] [--n
uggest] [--no-dev] [--no-autoloader] [--no-progress] [--no-install] [--audit] [--audit-format AUDIT-FORMAT] [-v|vv|vv
-verbose] [-o|--optimize-autoloader] [-a|--classmap-authoritative] [--apcu-autoloader] [--apcu-autoloader-prefix APCU
HTOLOADER-PREFIX] [--ignore-platform-req IGNORE-PLATFORM-REQ] [--ignore-platform-reqs] [--] [<packages>...]
make: *** [Makefile:56: install] Error 1
root@localhost:~/Reto3_equipo2/docker# mkdir -p /var/www/html/laravel/vendor
```

root@localhost:~/Reto3 equipo2/docker#

```
root@localhost:~/Reto3_equipo2/docker# composer --version
Composer version 2.8.5 2025-01-21 15:23:40
PHP version 8.2.26 (/usr/bin/php8.2)
Run the "diagnose" command to get more detailed diagnostics output.
root@localhost:~/Reto3 equipo2/docker#
root@localhost:~/Reto3 equipo2# cd laravel/
root@localhost:~/Reto3_equipo2/laravel# composer install
Installing dependencies from lock file (including require-dev)
Verifying lock file contents can be installed on current platform
Package operations: 125 installs, 0 updates, 0 removals
  - Downloading dragon-code/support (6.15.1)

    Downloading nesbot/carbon (3.8.4)

  - Downloading laravel/serializable-closure (v2.0.2)
  - Downloading laravel/prompts (v0.3.4)
  - Downloading laravel/framework (v11.41.3)
  - Downloading laravel-lang/lang (15.14.0)

    Downloading laravel/pint (v1.20.0)

  - Downloading myclabs/deep-copy (1.12.1)
  - Downloading phpunit/phpunit (11.5.7)
```

Después en el navegador pone blog.test y le aparece la pestaña en blanco.

```
root@localhost:~# cd back/
 root@localhost:~/back# nano Dockerfile
root@localhost:~/back# nano docker-compose.yml
root@localhost:~/back# nano docker-compose.yml
root@localhost:~/back# cd ..
root@localhost:~# mkdir front
root@localhost:~# cd front/
 root@localhost:~/front# nano nginx.conf
 root@localhost:~/front# ls
[+] Building 22.1s (6/14)
=> WARN: FromAsCasing: 'as' and 'FROM' keywords' casing do not match (line 2)
=> WARN: FromAsCasing: 'as' and 'FROM' keywords' casing do not match (line 20)
                                                                                                           docker:default
                                                                                                                     0.05
                                                                                                                     0.05
Esto va en el Dockerfile:
# Usa la imagen base oficial de PHP con Apache y PHP 8.2
FROM php:8.2-apache
# Instala extensiones necesarias para Laravel y cron
RUN apt-get update && apt-get install -y \
   libzip-dev \
   unzip \
   git \
   cron \
   && docker-php-ext-install zip pdo pdo_mysql
```

Instala Composer COPY --from=composer:2.6 /usr/bin/composer /usr/bin/composer

Habilita el módulo de reescritura de Apache RUN a2enmod rewrite RUN sed -i 's!/var/www/html!/var/www/html/public!g' /etc/apache2/sites-available/000-default.conf

Establece el directorio de trabajo WORKDIR /var/www/html

Copia los archivos del proyecto Laravel COPY . /var/www/html

Configura permisos
RUN chown -R www-data:www-data/var/www/html

Expone el puerto 80 EXPOSE 80

Comando para iniciar cron y Apache CMD ["sh", "-c", "cron && apache2-foreground"]

```
GNU nano 7.2
                                                           docker-compose.yml
version: '3.8'
services:
  laravel-app:
    build:
      context: .
      dockerfile: Dockerfile
    ports:
    volumes:
      - ./proyecto-backend:/var/www/html
    environment:
      APP ENV: local
      APP_DEBUG: true
      APP_KEY: "base64:rhKHr2xitJBkC3MBj+PtBC3dMs9D4pCDOPz+tuVGt1k="
      DB_CONNECTION: mysql
      DB_HOST: "172.20.227.241"
      DB_PORT: 3306
      DB_DATABASE: "grupo2_2425"
DB_USERNAME: "grupo2_2425"
      DB_PASSWORD: "Rn/AjQi[jgh5pxxz"
version: '3.8'
services:
 laravel-app:
  build:
   context: .
   dockerfile: Dockerfile
  ports:
```

APP_KEY: "base64:rhKHr2xitJBkC3MBj+PtBC3dMs9D4pCDOPz+tuVGtlk="

- "8080:80" volumes:

environment:

APP_ENV: local

APP_DEBUG: true

DB PORT: 3306

- ./proyecto-backend:/var/www/html

DB_CONNECTION: mysql DB_HOST: "172.20.227.241"

DB_DATABASE: "grupo2_2425"
DB_USERNAME: "grupo2_2425"
DB_PASSWORD: "Rn/AjQi[jgh5pxxz"

```
root@localhost:~/front# ls
Dockerfile docker-compose.yml nginx.conf
root@localhost:~/front# cd .
root@localhost:~# cd Reto3_equipo2/
root@localhost:~/Reto3_equipo2# ls
Base_datos LICENSE README.md docker laravel
root@localhost:~/Reto3_equipo2# cd ..
 root@localhost:~# rm -rf
                                                                  .profile
 bash_history .cache/
                                            .docker/
                                                                                        Reto3_equipo2/ front/
                     .config/
                                                                  .ssh/
                                                                                       back/
 bashrc
root@localhost:~# rm -rf front
root@localhost:~# cd back/
root@localhost:~/back# ls
Dockerfile docker-compose.yml
root@localhost:~/back# nano docker-compose.yml
root@localhost:~/back# nano docker-compose.yml
root@localhost:~/back# mkdir proyecto-backend
root@localhost:~/back# cd ..
root@localhost:~# ls
Reto3_equipo2 back
root@localhost:~# cd Reto3_equipo2/
root@localhost:~/Reto3 equipo2# ls
root@localhost:~/Reto3_equipo2# cp -r laravel/* ../back/proyecto-backend/
root@localhost:~/Reto3_equipo2# cd ..
 root@localhost:~# cd back/
 root@localhost:~/back# ls
Dockerfile docker-compose.yml proyecto-backend
root@localhost:~/back# cd proyecto-backend/
root@localhost:~/back/proyecto-backend# ls
              bootstrap config package.json public composer.json database phpunit.xml resource composer.lock package-lock.json postcss.config.js routes
README.md bootstrap
                                                                                                        storage
                                                                                                                                     vendor
                                                                                         resources tailwind.config.js vite.config.js
app
root@localhost:~/back/proyecto-backend# nano .env
 root@localhost:~/back/proyecto-backend# ls
README.md bootstrap config package.json public storage vendor

app composer.json database phpunit.xml resources tailwind.config.js vite.config.js

artisan composer.lock package-lock.json postcss.config.js routes tests

root@localhost:~/back/proyecto-backend# docker compose build

VARN[0000] /root/back/docker-compose.yml: the attribute `version` is obsolete, it will be ignored, please remove it to a
oid potential confusion
[+] Building 69.2s (16/16) FINISHED
                                                                                                                                                   docker:default
```

Dentro de .env iría el .env del proyecto:

```
GNU nano 7.2
                                                              .env
APP_NAME=Laravel
APP ENV=local
APP_KEY=base64:rozbel/kabqs15ZhDPd7PQ62oR9Vgr/BF3mzr4kllLs=
APP DEBUG=true
APP_TIMEZONE=UTC
APP_URL=http://localhost
APP_LOCALE=en
APP_FALLBACK_LOCALE=en
APP_FAKER_LOCALE=en_US
APP_MAINTENANCE_DRIVER=file
APP_MAINTENANCE_STORE=database
PHP_CLI_SERVER_WORKERS=4
3CRYPT_ROUNDS=12
.OG_CHANNEL=stack
OG STACK=single
OG_DEPRECATIONS_CHANNEL=null
OG LEVEL=debug
OB CONNECTION=mysql
```

```
DB_CONNECTION=mysql
DB_HOST=172.20.227.241
DB_PORT=3306
DB_DATABASE=reto3
DB_USERNAME=grupo2_2425
DB_PASSWORD=Rn/AjQi[jgh5pxxz
```

```
[+] Building 1/1
 oot@localhost:~/back/proyecto-backend# docker compose up -d
  NRN[0000] /root/back/docker-compose.yml: the attribute `version` is obsolete, it will be ignored, please remove it to
 oid potential confusion
   Network back_default
   Container back-laravel-app-1
 oot@localhost:~/back/proyecto-backend# if config
 oot@localhost:~/back/proyecto-backend# ifconfig
-bash: ifconfig: command not found
root@localhost:~/back/proyecto-backend# ip a
1: lo: <LOOPBACK,UP,LOWER_UP> mtu 65536 qdisc noqueue state UNKNOWN group default qlen 1000
link/loopback 00:00:00:00:00:00 brd 00:00:00:00:00
    inet 127.0.0.1/8 scope host lo
       valid_lft forever preferred_lft forever
    inet6 ::1/128 scope host noprefixroute
       valid_lft forever preferred_lft forever
2: eth0: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc fq_codel state UP group default qlen 1000
    link/ether 02:00:ac:14:e4:2b brd ff:ff:ff:ff:ff
    altname enp3s0
    inet 172.20.228.43/16 brd 172.20.255.255 scope global eth0
  valid_lft forever preferred_lft forever
    inet6 fe80::acff:fe14:e42b/64 scope link
       valid_lft forever preferred_lft forever
   laravel-app
root@localhost:~/back# docker compose up -d
 ARN[0000] /root/back/docker-compose.yml: the attribute `version` is obsolete, it will be ignored, please remove it to
void potential confusion
[+] Running 1/1
☑ Container back-laravel-app-1 Running
oot@localhost:~/back# docker exec -it reto3-php-1 bash
Error response from daemon: No such container: reto3-php-1
root@localhost:~/back# docker ps -a
CONTAINER ID IMAGE
                                     COMMAND
                                                                 CREATED
                                                                                   STATUS
                                                                                                               PORTS
                        NAMES
29a558236ba0 back-laravel-app "docker-php-entrypoi..." 4 minutes ago Up 4 minutes
29a558236ba0 back-laravel-app
, [::]:8080->80/tcp back-laravel-app-1
| hello-world "/hello"
                                                                                                               0.0.0.0:8080->80/t
                                                                                   Exited (0) 2 hours ago
                                                                 2 hours ago
                       zen proskuriakova
b4573a5cb6dc redis:7.2-alpine
                                      "docker-entrypoint.s..." 2 hours ago
                                                                                                               6379/tcp
                                                                                   Up 2 hours
                       reto3-redis-1
root@localhost:~/back# docker exec -it back-laravel-app-1 bash
root@29a558236ba0:/var/www/html# cd laravel
bash: cd: laravel: No such file or directory
root@29a558236ba0:/var/www/html# cd /var/www/html/laravel
bash: cd: /var/www/html/laravel: No such file or directory
root@29a558236ba0:/var/www/html# ls
```

root@29a558236ba0:/var/www/html# ls

README.md bootstrap config package.json public storage vendor
app composer.json database phpunit.xml resources tailwind.config.js vite.config.js
artisan composer.lock package-lock.json postcss.config.js routes tests
root@29a558236ba0:/var/www/html# cd ..
root@29a558236ba0:/var/www# ls
html
root@29a558236ba0:/var/www# cd html/
root@29a558236ba0:/var/www/html# chmod -R 777 storage bootstrap/cache
root@29a558236ba0:/var/www/html# chown -R www-data:www-data storage bootstrap/cache
root@29a558236ba0:/var/www/html# chown -R www-data:www-data storage bootstrap/cache