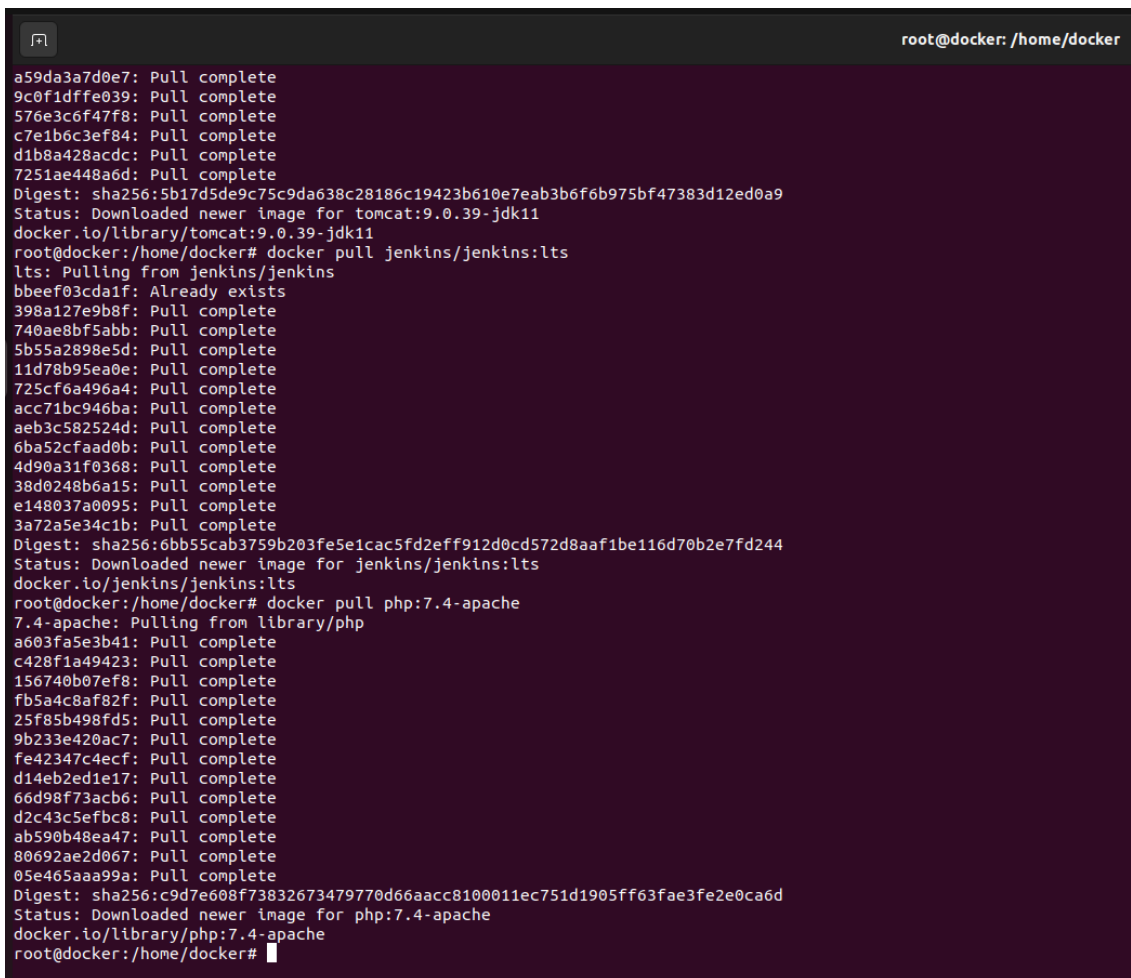


# Docker

1. Descarga las siguientes imágenes: ubuntu:18.04, httpd, tomcat:9.0.39-jdk11, jenkins/jenkins:lts, php:7.4-apache.

```
docker pull ubuntu:18.04
docker pull httpd
docker pull tomcat:9.0.39-jdk11
docker pull jenkins/jenkins:lts
docker pull php:7.4-apache
```



```
root@docker: /home/docker
a59da3a7d0e7: Pull complete
9c0f1dffe039: Pull complete
576e3c6f47f8: Pull complete
c7e1b6c3ef84: Pull complete
d1b8a428acdc: Pull complete
7251ae448a6d: Pull complete
Digest: sha256:5b17d5de9c75c9da638c28186c19423b610e7eab3b6f6b975bf47383d12ed0a9
Status: Downloaded newer image for tomcat:9.0.39-jdk11
docker.io/library/tomcat:9.0.39-jdk11
root@docker:/home/docker# docker pull jenkins/jenkins:lts
lts: Pulling from jenkins/jenkins
bbeef03cda1f: Already exists
398a127e9b8f: Pull complete
740ae8bf5abb: Pull complete
5b55a2898e5d: Pull complete
11d78b95ea0e: Pull complete
725cf6a496a4: Pull complete
acc71bc946ba: Pull complete
aeb3c582524d: Pull complete
6ba52cfad0b: Pull complete
4d90a31f0368: Pull complete
38d0248b6a15: Pull complete
e148037a0095: Pull complete
3a72a5e34c1b: Pull complete
Digest: sha256:6bb55cab3759b203fe5e1cac5fd2eff912d0cd572d8aaf1be116d70b2e7fd244
Status: Downloaded newer image for jenkins/jenkins:lts
docker.io/jenkins/jenkins:lts
root@docker:/home/docker# docker pull php:7.4-apache
7.4-apache: Pulling from library/php
a603fa5e3b41: Pull complete
c428f1a49423: Pull complete
156740b07ef8: Pull complete
fb5a4c8af82f: Pull complete
25f85b498fd5: Pull complete
9b233e420ac7: Pull complete
fe42347c4ecf: Pull complete
d14eb2ed1e17: Pull complete
66d98f73acb6: Pull complete
d2c43c5efbc8: Pull complete
ab590b48ea47: Pull complete
80692ae2d067: Pull complete
05e465aaa99a: Pull complete
Digest: sha256:c9d7e608f73832673479770d66aacc8100011ec751d1905ff63fae3fe2e0ca6d
Status: Downloaded newer image for php:7.4-apache
docker.io/library/php:7.4-apache
root@docker:/home/docker#
```

2. Muestras las imágenes que tienes descargadas.

```
docker images
```

```
root@docker:/home/docker# docker images
REPOSITORY          TAG                 IMAGE ID            CREATED             SIZE
httpd                latest             81a1863c7bda       2 hours ago        145MB
jenkins/jenkins      lts                3875608bd391       3 days ago         468MB
ubuntu               18.04             5d2df19066ac       9 days ago         63.1MB
nextcloud            latest             88161e9426f1       3 weeks ago        1.02GB
nginx                latest             a99a39d070bf       3 weeks ago        142MB
debian               latest             5c8936e57a38       3 weeks ago        124MB
php                  7.4-apache        20a3732f422b       2 months ago       453MB
hello-world          latest             feb5d9fea6a5       16 months ago      13.3kB
tomcat               9.0.39-jdk11      2703bbe9e9d4       2 years ago        648MB
root@docker:/home/docker#
```

3. Crea un contenedor demonio con la imagen php:7.4-apache.

```
docker run -d --name apache php:7.4-apache
```

```
root@docker:/home/docker# docker run -d --name apache php:7.4-apache
76643ba91d4baa939ed357f740cfdc72a407311761c0f2acf48209d6f1e4e46f
root@docker:/home/docker#
```

4. Comprueba el tamaño del contenedor en el disco duro.

```
docker ps -a -s
```

```
root@docker:/home/docker# docker ps -a -s
CONTAINER ID   IMAGE          COMMAND                  CREATED    STATUS    PORTS    NAMES    SIZE
76643ba91d4b   php:7.4-apache "docker-php-entrypoi..." 6 minutes ago Up 6 minutes 80/tcp   apache   2B (virtual 453MB)
9a4e0254aebb   nextcloud     "/entrypoint.sh apac..." 2 weeks ago Exited (255) 20 minutes ago 0.0.0.0:8080->80/tcp, :::8080->80/tcp adoring_colden 2B (virtual 1.02GB)
27282c64aee9d   nginx        "/docker-entrypoint..." 2 weeks ago Exited (0) 2 weeks ago          clever_colden 1.09kB (virtual 142MB)
44a59df8bc42   hello-world   "/hello"                  2 weeks ago Exited (0) 2 weeks ago          flamboyant_murdock 0B (virtual 13.3kB)
root@docker:/home/docker#
```

5. Con la instrucción docker cp podemos copiar ficheros a o desde un contenedor. Puedes encontrar información es esta página. Crea un fichero en tu ordenador, con el siguiente contenido:

```
<?php
    echo phpinfo();
?>
```

```
root@docker:/home/docker# nano info.php
root@docker:/home/docker# cat info.php
<?php
    echo phpinfo();
?>
root@docker:/home/docker#
```

Copia un fichero info.php al directorio /var/www/html del contenedor con docker cp.

```
docker cp info.php apache:/var/www/html
```

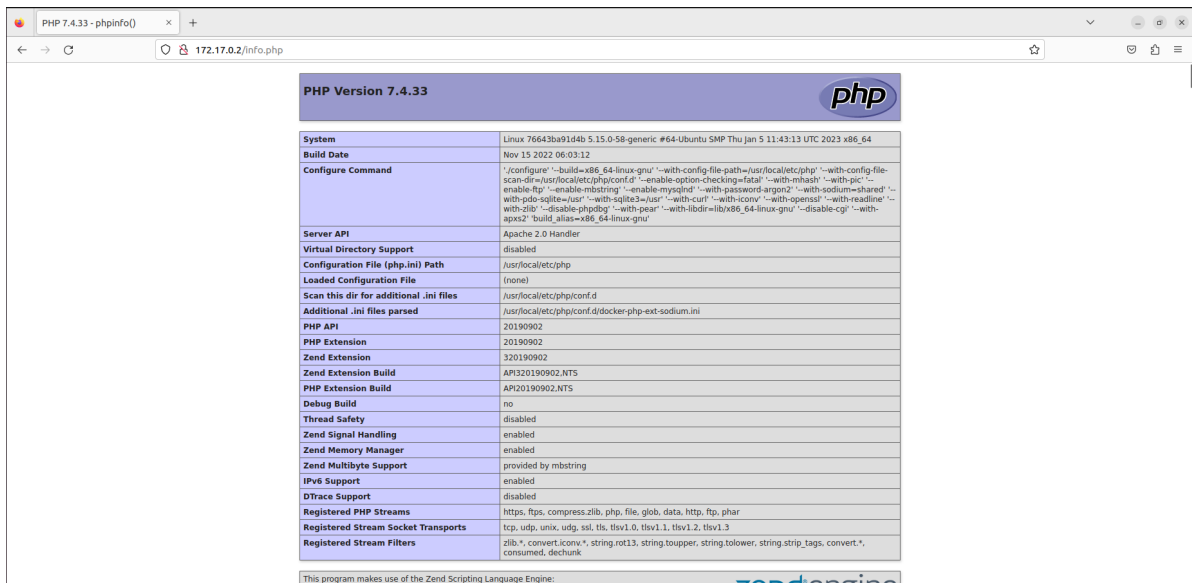
```
root@docker:/home/docker# docker cp info.php apache:/var/www/html
Successfully copied 2.048kB to apache:/var/www/html
root@docker:/home/docker#
```

6. Vuelve a comprobar el espacio ocupado por el contenedor.

```
docker ps -a -s
```

```
root@docker:/home/docker# docker ps -a -s
CONTAINER ID   IMAGE          COMMAND                  CREATED        STATUS        PORTS                               NAMES
76643ba91d4b   php:7.4-apache "docker-php-entrypoint..." 12 minutes ago Up 11 minutes 80/tcp                             apache
9a4e0254aebb   nextcloud     "/entrypoint.sh apac..." 2 weeks ago   Exited (255) 26 minutes ago      0.0.0.0:8080->80/tcp, :::8080->80/tcp   adoring_colden
27282c04ee9d   nginx        "/docker-entrypoint..." 2 weeks ago   Exited (0) 2 weeks ago           clever_colden
44a59df8bc42   hello-world   "/hello"                 2 weeks ago   Exited (0) 2 weeks ago           Flanboyant_murdock
root@docker:/home/docker#
```

7. Accede al fichero `info.php` desde un navegador web.



The screenshot shows a web browser window with the address bar displaying `172.17.0.2/info.php`. The page content is the PHP configuration page for version 7.4.33. It includes a table with the following information:

PHP Version 7.4.33	
System	Linux 76643ba91d4b 5.15.0-58-generic #64-Ubuntu SMP Thu Jan 5 11:43:13 UTC 2023 x86_64
Build Date	Nov 15 2022 06:03:12
Configure Command	"/configure" "-build=x86_64-linux-gnu" "-with-config-file-path=/usr/local/etc/php" "-with-config-file-scan-dir=/usr/local/etc/php/conf.d" "-enable-option-checking=fatal" "-with-mhash" "-with-pic" "-enable-ftp" "-enable-mbstring" "-enable-mysqlnd" "-with-password-argon2" "-with-sodium=shared" "-with-pdo-sqlite=/usr" "-with-sqlite=/usr" "-with-curl" "-with-iconv" "-with-openssl" "-with-readline" "-with-zlib" "-disable-phpdbg" "-with-pcre" "-with-libdir=libx86_64-linux-gnu" "-disable-cgi" "-with-apxs2" "build_alias=x86_64-linux-gnu"
Server API	Apache 2.0 Handler
Virtual Directory Support	disabled
Configuration File (php.ini) Path	/usr/local/etc/php
Loaded Configuration File	(none)
Scan this dir for additional .ini files	/usr/local/etc/php/conf.d
Additional .ini files parsed	/usr/local/etc/php/conf.d/docker-php-ext-sodium.ini
PHP API	20190902
PHP Extension	20190902
Zend Extension	320190902
Zend Extension Build	API320190902.NTS
PHP Extension Build	API20190902.NTS
Debug Build	no
Thread Safety	disabled
Zend Signal Handling	enabled
Zend Memory Manager	enabled
Zend Multibyte Support	provided by mbstring
IPv6 Support	enabled
DTrace Support	disabled
Registered PHP Streams	https, ftps, compress.zlib, php, file, glob, data, http, ftp, phar
Registered Stream Socket Transports	tcp, udp, unix, udg, ssl, tls, tlsv1.0, tlsv1.1, tlsv1.2, tlsv1.3
Registered Stream Filters	zlib.*, convert.iconv.*, string.rot13, string.toupper, string.tolower, string.strip_tags, convert.*, consumed, dechunk

At the bottom of the page, it states: "This program makes use of the Zend Scripting Language Engine:"