

# Instalar NextCloud

## Ejecutar un update y upgrade

```
apt update -y  
apt upgrade -y
```

Instalar curl

```
apt install curl -y
```

Podemos usar php8.1 o bien php8.2

## PHP 8.1

### Preparar la instalación de PHP8.1

```
apt install -y gnupg2 ca-certificates apt-transport-https software-properties-common  
wget -q0 - https://packages.sury.org/php/apt.gpg | apt-key add  
echo "deb https://packages.sury.org/php/ buster main" | tee /etc/apt/sources.list.d/php.list  
apt update -y
```

### Instalar PHP 8.1

```
apt install php8.1
```

### Instalar módulos de PHP necesarios

```
apt install php8.1-mysql php8.1-imap php8.1-ldap php8.1-xml php8.1-gd php8.1-curl php8.1-  
mbstring php8.1-zip php8.1-simplexml php8.1-dom php8.1-intl php8.1-fpm php8.1-bcmath php8.1-  
gmp php8.1-imagick -y
```

# PHP 8.2

## Instalar PHP 8.2

```
apt install php8.2
```

## Instalar módulos de PHP necesarios

```
apt install php8.2-mysql php8.2-imap php8.2-ldap php8.2-xml php8.2-gd php8.2-curl php8.2-mbstring php8.2-zip php8.2-simplexml php8.2-dom php8.2-intl php8.2-fpm php8.2-bcmath php8.2-gmp php8.2-imagick -y
```

# Soporte SVG

## Instalar soporte para SVG

```
apt-get install libmagickcore-6.q16-6-extra
```

# Instalar Mariadb y soporte para PHP

```
apt -y install mariadb-server php-mysql
```

Instalar soporte para php 8 en apache2 (luego se quitará), ya que se instala por defecto con el php

```
apt install apache2 libapache2-mod-php8.1
```

# Configurar Mariadb

```
mysql -u root -p
```

Generar la BBDD de Nextcloud así como las credenciales

```
CREATE DATABASE nextcloud;
GRANT ALL ON nextcloud.* TO 'nextcloud_user'@'localhost' IDENTIFIED BY 'mipassword';
FLUSH PRIVILEGES;
EXIT;
```

# Descargar e instalar Nextcloud

```
cd /tmp
apt install zip -y
wget https://download.nextcloud.com/server/releases/latest.zip
unzip latest-22.zip
mv nextcloud /var/www/
cd /var/www/
chown -R www-data:www-data nextcloud
chmod -R 755 nextcloud
```

## Instalar Nginx

Pararemos el servicio Apache2 y lo desactivaremos

```
service apache2 stop
systemctl disable apache2
```

## Instalaremos nginx

```
apt-get install nginx -y
```

## Arrancaremos y activaremos Nginx y php-fpm 8.1

```
service nginx start
systemctl enable nginx
service php8.1-fpm start
systemctl enable php8.1-fpm
```

## Arrancaremos y activaremos Nginx y php-fpm 8.2

```
service nginx start
systemctl enable nginx
service php8.2-fpm start
systemctl enable php8.2-fpm
```

## Crear el site nextcloud en nginx

Crearemos el sitio en /etc/nginx/sites-available/

```
nano /etc/nginx/sites-available/my-nextcloud.conf
```

La configuración por defecto que nos aparece en la documentación de Nextcloud es la siguiente:

```
upstream php-handler {
    server 127.0.0.1:9000;
    #server unix: /var/run/php/php8.2-fpm.sock;
}

server {
    listen 80;
    listen [::]:80;
    server_name cloud.example.com;

    # Enforce HTTPS
    return 301 https://$server_name$request_uri;
}

server {
    listen 443      ssl http2;
    listen [::]:443 ssl http2;
    server_name cloud.example.com;

    # Use Mozilla's guidelines for SSL/TLS settings
    # https://mozilla.github.io/server-side-tls/ssl-config-generator/
    ssl_certificate      /etc/ssl/nginx/cloud.example.com.crt;
    ssl_certificate_key  /etc/ssl/nginx/cloud.example.com.key;

    # HSTS settings
    # WARNING: Only add the preload option once you read about
    # the consequences in https://hstspreload.org/. This option
    # will add the domain to a hardcoded list that is shipped
    # in all major browsers and getting removed from this list
    # could take several months.
    #add_header Strict-Transport-Security "max-age=15768000; includeSubDomains; preload;"
    always;

    # set max upload size
    client_max_body_size 512M;
    fastcgi_buffers 64 4K;
```

```

# Enable gzip but do not remove ETag headers
gzip on;
gzip_vary on;
gzip_comp_level 4;
gzip_min_length 256;
gzip_proxied expired no-cache no-store private no_last_modified no_etag auth;
gzip_types application/atom+xml application/javascript application/json
application/ld+json application/manifest+json application/rss+xml application/vnd.geo+json
application/vnd.ms-fontobject application/x-font-ttf application/x-web-app-manifest+json
application/xhtml+xml application/xml font/opentype image/bmp image/svg+xml image/x-icon
text/cache-manifest text/css text/plain text/vcard text/vnd.rim.location.xloc text/vtt text/x-
component text/x-cross-domain-policy;

# Pagespeed is not supported by Nextcloud, so if your server is built
# with the `ngx_pagespeed` module, uncomment this line to disable it.
#pagespeed off;

# HTTP response headers borrowed from Nextcloud `.htaccess`
add_header Referrer-Policy "no-referrer" always;
add_header X-Content-Type-Options "nosniff" always;
add_header X-Download-Options "noopen" always;
add_header X-Frame-Options "SAMEORIGIN" always;
add_header X-Permitted-Cross-Domain-Policies "none" always;
add_header X-Robots-Tag "none" always;
add_header X-XSS-Protection "1; mode=block" always;

# Remove X-Powered-By, which is an information leak
fastcgi_hide_header X-Powered-By;

# Path to the root of your installation
root /var/www/nextcloud;

# Specify how to handle directories -- specifying `/index.php$request_uri`
# here as the fallback means that Nginx always exhibits the desired behaviour
# when a client requests a path that corresponds to a directory that exists
# on the server. In particular, if that directory contains an index.php file,
# that file is correctly served; if it doesn't, then the request is passed to
# the front-end controller. This consistent behaviour means that we don't need
# to specify custom rules for certain paths (e.g. images and other assets,

```

```

# `/updater`, `/ocm-provider`, `/ocs-provider`), and thus
# `try_files $uri $uri/ /index.php$request_uri`
# always provides the desired behaviour.
index index.php index.html /index.php$request_uri;

# Rule borrowed from `.htaccess` to handle Microsoft DAV clients
location = / {
    if ( $http_user_agent ~ ^DavClnt ) {
        return 302 /remote.php/webdav/$is_args$args;
    }
}

location = /robots.txt {
    allow all;
    log_not_found off;
    access_log off;
}

# Make a regex exception for `/.well-known` so that clients can still
# access it despite the existence of the regex rule
# `location ~ /\.(|autotest|...)` which would otherwise handle requests
# for `/.well-known`.
location ^~ /.well-known {
    # The rules in this block are an adaptation of the rules
    # in `.htaccess` that concern `/.well-known`.

    location = /.well-known/carddav { return 301 /remote.php/dav/; }
    location = /.well-known/caldav { return 301 /remote.php/dav/; }

    location /.well-known/acme-challenge { try_files $uri $uri/ =404; }
    location /.well-known/pki-validation { try_files $uri $uri/ =404; }

    # Let Nextcloud's API for `/.well-known` URIs handle all other
    # requests by passing them to the front-end controller.
    return 301 /index.php$request_uri;
}

# Rules borrowed from `.htaccess` to hide certain paths from clients
location ~ ^/(?:(build| tests| config| lib| 3rdparty| templates| data)(?:$| /)) { return 404; }
location ~ ^/(?:(\.| autotest| occ| issue| indie| db_| console)) { return 404; }

```

```
# Ensure this block, which passes PHP files to the PHP process, is above the blocks
# which handle static assets (as seen below). If this block is not declared first,
# then Nginx will encounter an infinite rewriting loop when it prepends `/index.php`
# to the URI, resulting in a HTTP 500 error response.
```

```
location ~ \.php(?:$|/) {
```

```
    fastcgi_split_path_info ^(.+?\.php)(/.*)$;
```

```
    set $path_info $fastcgi_path_info;
```

```
    try_files $fastcgi_script_name =404;
```

```
    include fastcgi_params;
```

```
    fastcgi_param SCRIPT_FILENAME $document_root$fastcgi_script_name;
```

```
    fastcgi_param PATH_INFO $path_info;
```

```
    fastcgi_param HTTPS on;
```

```
    fastcgi_param modHeadersAvailable true;          # Avoid sending the security headers
```

```
twice
```

```
    fastcgi_param front_controller_active true;      # Enable pretty urls
```

```
    fastcgi_pass php-handler;
```

```
    fastcgi_intercept_errors on;
```

```
    fastcgi_request_buffering off;
```

```
}
```

```
location ~ \.(?:css|js|svg|gif|png|jpg|ico)$ {
```

```
    try_files $uri /index.php$request_uri;
```

```
    expires 6M;          # Cache-Control policy borrowed from `.htaccess`
```

```
    access_log off;      # Optional: Don't log access to assets
```

```
}
```

```
location ~ \.woff2?$ {
```

```
    try_files $uri /index.php$request_uri;
```

```
    expires 7d;          # Cache-Control policy borrowed from `.htaccess`
```

```
    access_log off;      # Optional: Don't log access to assets
```

```
}
```

```
# Rule borrowed from `.htaccess`
```

```
location /remote {
```

```
    return 301 /remote.php$request_uri;
```

```

    }

    location / {
        try_files $uri $uri/ /index.php$request_uri;
    }
}

```

Tendremos que cambiar lo siguiente:

php-handler. Comentar la linea de 127.0.0.1 y descomentar la del socket fpm

Para ello comprobaremos si existe el socket

```

root@demo: /etc/nginx/sites-available# ls -la /var/run/php/php8.1-fpm.sock
srw-rw-r-- 1 www-data www-data 0 Aug  8 23:56 /var/run/php/php8.1-fpm.sock
root@demo: /etc/nginx/sites-available#

```

Si existe usaremos el socket de php-fpm. Si no tendremos que iniciar el php-fpm

```

upstream php-handler {
    #server 127.0.0.1:9000;
    server unix:/var/run/php/php8.2-fpm.sock;
}

```

Si no tenemos certificado de pago, comentaremos las líneas de los certificados

```

# Use Mozilla's guidelines for SSL/TLS settings
# https://mozilla.github.io/server-side-tls/ssl-config-generator/
#ssl_certificate      /etc/ssl/nginx/cloud.example.com.crt;
#ssl_certificate_key  /etc/ssl/nginx/cloud.example.com.key;

```

Cambiaremos el nombre del server por el nuestro, en lugar de cloud.example.com, pondremos el nuestro. Tanto el el apartado de server:80 como en el de server:443 Cambiaremos la ruta a la que apunta

```

# Path to the root of your installation
root /var/www/nextcloud;

```

En la parte de add\_header, agregaremos esto al final

```

add_header Strict-Transport-Security "max-age=15768000" always;

```

Agregaremos el sitio a los sitios disponibles



```
cd /etc/nginx/sites-enabled
ln -s /etc/nginx/sites-available/my-nextcloud.conf my-nextcloud.conf
```

# Certificado LetsEncrypt

Instalaremos las librerías para el certificado de LetsEncrypt

```
apt install python3-acme python3-certbot python3-mock python3-openssl python3-pkg-resources pyth
```

Instalaremos el certbot

```
apt install python3-certbot-nginx
```

Generamos el certificado

```
certbot --nginx -d my-nextcloud.com
```

## Caché

Podemos usar memcached o redis para la caché.

## Instalar Memcached

para instalar memcached, primero lo instalaremos

```
apt install memcached
apt install php-memcached
```

A continuación lo habilitaremos al inicio y lo arrancaremos

```
systemctl enable memcached
systemctl start memcached
```

Y por último agregaremos la configuración en el archivo config.php

```
'memcache.local' => '\OC\Memcache\Memcached',
'memcache.distributed' => '\OC\Memcache\Memcached',
'memcached_servers' => array(
    array('127.0.0.1', 11211),
),
```

# Instalar redis

Para instalar redis habilitaremos redis y apcu

```
apt install php8.1-apcu php8.1-redis redis-server
```

```
apt install php8.2-apcu php8.2-redis redis-server
```

Habilitamos redis

```
systemctl enable redis-server
```

Ahora configuramos redis

Buscaremos la siguiente línea **unixsocket /var/run/redis/redis.sock** y la descomentaremos. Debajo de esa línea nos encontraremos con **unixsocketperm 700** el cual también descomentaremos y cambiaremos por **unixsocketperm 770**. Guardamos y salimos.

Añadimos el usuario redis al grupo de Apache

```
usermod -a -G redis www-data
```

Finalmente, reiniciamos los servicios de Apache y Redis:

```
# systemctl restart nginx
# systemctl enable redis-server
# systemctl restart redis-server
```

Tenemos que configurar NextCloud para que use Redis, para ello tendremos que modificar el fichero de configuración de NextCloud agregaremos la configuración en el archivo config.php y añadiremos lo siguiente:

```
'memcache.local' => '\\0C\\Memcache\\APCu',
'memcache.locking' => '\\0C\\Memcache\\Redis',
'filelocking.enabled' => 'true',
'redis' =>
    array (
        'host' => '127.0.0.1',
        'port' => 6379,
        'timeout' => 0.0,
    ),
```

Desde **Nextcloud 12**, se requiere una configuración adicional para configurar correctamente **Opcache de PHP**. Se muestra el error «**La Opcache de PHP no está bien configurada. Para mejorar el rendimiento se recomienda usar las siguientes configuraciones en el** `php.ini` **»**. Para ello tendremos que editar el fichero `/etc/php/8.1/fpm/php.ini`.

Al final del fichero añadimos lo siguiente:

```
; Nextcloud Opcache settings
opcache.enable=1
opcache.enable_cli=1
opcache.interned_strings_buffer=8
opcache.max_accelerated_files=10000
opcache.memory_consumption=128
opcache.save_comments=1
opcache.revalidate_freq=1
```

Y reiniciamos PHP-FPM:

```
systemctl restart php8.1-fpm
```

# Ajustes finales

## Tamaño de subida de archivos

Modificaremos el fichero `/etc/php/8.1/fpm/php.ini` y modificaremos los parámetros `upload_max_filesize` y `post_max_size` y les pondremos el valor de `2048M`. Finalmente, reiniciaremos PHP-FPM para que entre en efecto la modificación

## Enlaces amigables

Otra cosa que es bueno configurar son los enlaces amigables para que las **URL's** sean visualmente más fácil de recordar de **NextCloud** para ello modificamos el archivo `config.php` y añadimos lo siguiente:

```
'htaccess.RewriteBase' => '/',
```

Y si reiniciamos el servicio del Nginx veremos que de las URL

`nube.tecnocratica.net/index.php/apps/` pasaremos a `nube.tecnocratica.net/apps/`.

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