

Install Nextcloud 16 on Debian 10

02/23/2021 09:13 PM - Daniel Curtis

Status:	Closed	Start date:	02/23/2021
Priority:	Normal	Due date:	
Assignee:	Daniel Curtis	% Done:	100%
Category:	Web Server	Estimated time:	0.00 hour
Target version:	Debian	Spent time:	0.00 hour

Description

This is a guide on setting up NextCloud 16 with Nginx on Debian 10.

Prepare the Environment

- Before installation of the components, make sure everything is up to date using the following command:

```
apt update && apt upgrade
```

- Create the nextcloud user:

```
groupadd nextcloud
useradd -M -g nextcloud -s /usr/sbin/nologin -c "NextCloud" nextcloud
```

Install Nginx

- Install Nginx

```
apt install nginx
```

- Start and enable nginx at boot:

```
systemctl enable nginx
systemctl start nginx
```

Install PHP

- Install PHP and additional dependencies for nextcloud:

```
apt install php-fpm php-curl php-cli php-pgsql php-gd php-common php-xml php-json php-intl php-pear php-imagick php-dev php-common php-mbstring php-zip php-soap php-bz2 sudo unzip
```

- Edit the php fpm config:

```
vi /etc/php/7.3/fpm/php.ini
```

- And modify the following values:

```
date.timezone = America/Los_Angeles
cgi.fix_pathinfo=0
```

- Edit the php cli config:

```
vi /etc/php/7.3/cli/php.ini
```

- And modify the following values:

```
date.timezone = America/Los_Angeles
cgi.fix_pathinfo=0
```

- Create the nextcloud php-fpm pool config file:

```
vi /etc/php/7.3/fpm/pool.d/nextcloud.example.com.conf
```

- And add the following:

```
[nextcloud.example.com]
user = nextcloud
group = www-data
listen = /var/run/nextcloud.sock
listen.owner = nextcloud
listen.group = www-data
pm = dynamic
pm.max_children = 5
pm.start_servers = 2
pm.min_spare_servers = 1
pm.max_spare_servers = 3

env[HOSTNAME] = $HOSTNAME
env[PATH] = /usr/local/bin:/usr/bin:/bin
env[TMP] = /tmp
env[TMPDIR] = /tmp
env[TEMP] = /tmp

php_admin_value[session.save_path] = "/var/www/nextcloud/tmp"
```

- Start and enable php-fpm:

```
systemctl start php7.3-fpm
systemctl enable php7.3-fpm
```

Install PostgreSQL

- Start by installing the postgresql packages:

```
apt-get install postgresql{,-contrib,-client}-11
```

- Edit the pg_hba.conf file:

```
vi /etc/postgresql/11/main/pg_hba.conf
```

- And add the following to the end of the file to enable password authentication:

```
host      all          all          samehost    md5
```

- Enable, initialize and start PostgreSQL

```
systemctl enable postgresql
systemctl start postgresql
```

- Log in to postgresql user account

```
su - postgres
```

- Connect to postgresql database

```
psql -d template1
```

- Create a user and database for NextCloud:

```
CREATE USER nextclouduser WITH PASSWORD 'SuperSecretPassword' CREATEDB;

CREATE DATABASE nextcloudodb OWNER nextclouduser;
```

- Quit postgresql and exit the user:

```
\q
exit
```

Install Nextcloud

- Download nextcloud:

```
cd /var/www
wget https://download.nextcloud.com/server/releases/nextcloud-16.0.11.zip
unzip nextcloud-16.0.11.zip
```

- Create an **nextcloud.example.com server block** config file:

```
vi /etc/nginx/sites-available/nextcloud.example.com.conf
```

- Add the following:

```
upstream nextcloud-handler {
    server unix:/var/run/nextcloud.sock;
}

server {
    listen 80;
    server_name nextcloud.example.com;
```

```

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

# set max upload size
client_max_body_size 10G;
fastcgi_buffers 64 4K;

# Disable gzip to avoid the removal of the ETag header
gzip off;

rewrite ^/caldav(.*)$ /remote.php/caldav$1 redirect;
rewrite ^/carddav(.*)$ /remote.php/carddav$1 redirect;
rewrite ^/webdav(.*)$ /remote.php/webdav$1 redirect;

index index.php;
error_page 403 /core/templates/403.php;
error_page 404 /core/templates/404.php;

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

location ~ ^/(?:\.htaccess|data|config|db_structure\.xml|README) {
    deny all;
}

location / {
    # The following 2 rules are only needed with webfinger
    rewrite ^/\.well-known/host-meta /public.php?service=host-meta last;
    rewrite ^/\.well-known/host-meta.json /public.php?service=host-meta-json last;

    rewrite ^/\.well-known/carddav /remote.php/carddav/ redirect;
    rewrite ^/\.well-known/caldav /remote.php/caldav/ redirect;

    rewrite ^(/core/doc/[^\/]+/)$ $1/index.html;

    try_files $uri $uri/ =404;
}

location ~ \.php(?:$|/) {
    fastcgi_split_path_info ^(.+\.(php))(/.+)$;
    include fastcgi_params;
    fastcgi_param SCRIPT_FILENAME $document_root$fastcgi_script_name;
    fastcgi_param PATH_INFO $fastcgi_path_info;
    fastcgi_pass nextcloud-handler;
    fastcgi_intercept_errors on;
}

# Adding the cache control header for js and css files
# Make sure it is BELOW the location ~ \.php(?:$|/) { block
location ~* \.(?:css|js)$ {
    add_header Cache-Control "public, max-age=7200";
    # Add headers to serve security related headers
    add_header Strict-Transport-Security "max-age=15768000; includeSubDomains; preload;";
    add_header X-Content-Type-Options nosniff;
    add_header X-Frame-Options "SAMEORIGIN";
    add_header X-XSS-Protection "1; mode=block";
    add_header X-Robots-Tag none;
    # Optional: Don't log access to assets
    access_log off;
}

# Optional: Don't log access to other assets
location ~* \.(?:jpg|jpeg|gif|bmp|ico|png|swf)$ {
    access_log off;
}

```

```
}  
}
```

- Create the temporary session folder and restrict its permissions:

```
mkdir -p /var/www/nextcloud/tmp  
chmod o-rwx /var/www/nextcloud/tmp
```

- Change the ownership of the nextcloud directory:

```
chown -R nextcloud:www-data /var/www/nextcloud
```

- Enable the site:

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

- Restart nginx :

```
systemctl restart nginx
```

Redis

- Install Redis and PHP extension:

```
apt-get install redis-server php-redis
```

- Edit the redis config:

```
vi /etc/redis/redis.conf
```

- And modify the following parameters in the config:

```
port 0  
unixsocket /var/run/redis/redis.sock  
unixsocketperm 770
```

- Add nextcloud user to redis group

```
usermod -aG redis nextcloud
```

- Start and enable Redis at boot:

```
systemctl enable redis-server  
systemctl start redis-server
```

- Edit the NextCloud config:

```
vi /var/www/nextcloud/config/config.php
```

- And add the following **before** the ending);:

```
'memcache.locking' => '\OC\Memcache\Redis',  
'memcache.local' => '\OC\Memcache\Redis',  
'redis' => array(  
    'host' => '/var/run/redis/redis.sock',  
    'port' => 0,  
) ,
```

Resources

- https://docs.nextcloud.com/server/16/admin_manual/installation/index.html
- https://docs.nextcloud.com/server/16/admin_manual/configuration_database/linux_database_configuration.html
- https://docs.nextcloud.com/server/16/admin_manual/configuration_server/caching_configuration.html
- <https://www.howtoforge.com/tutorial/ubuntu-nginx-nextcloud/>

History

#1 - 02/24/2021 12:07 AM - Daniel Curtis

- *Description updated*
- *Status changed from New to Resolved*

#2 - 02/18/2022 08:08 PM - Daniel Curtis

- *% Done changed from 0 to 100*
- *Status changed from Resolved to Closed*