

Nextcloud Setup with Apache Behind Nginx Reverse Proxy

This guide explains how to set up Nextcloud on an Ubuntu server with Apache2 serving the Nextcloud app on port 7080, while Nginx handles SSL termination on port 443 as the reverse proxy.

This setup ensures that:

- Nginx handles SSL certificates and HTTPS traffic.
- Apache serves Nextcloud over HTTP on an internal port (7080).

Step 1: Install Apache and Enable Required Modules

First, install Apache2 if it's not already installed:

```
``bash
sudo apt update
sudo apt install apache2
``
```

Next, enable the necessary modules to serve Nextcloud properly:

```
``bash
sudo a2enmod ssl rewrite headers env dir mime proxy proxy_fcgi
``
```

Then restart Apache:

```
``bash
sudo systemctl restart apache2
``
```

Step 2: Install PHP and Required Extensions

Nextcloud requires PHP and several PHP extensions to function correctly. Install PHP and the required extensions:

```
``bash
sudo apt install php8.3 php8.3-fpm php8.3-mysql php8.3-xml php8.3-mbstring php8.3-zip
php8.3-curl php8.3-gd php8.3-intl php8.3-bz2
``
```

Step 3: Download and Install Nextcloud

Download the latest version of Nextcloud:

```
``bash
cd /var/www/
sudo wget https://download.nextcloud.com/server/releases/nextcloud-22.2.3.zip
sudo unzip nextcloud-22.2.3.zip
sudo chown -R www-data:www-data /var/www/nextcloud
``
```

Step 4: Set Up Apache for Nextcloud

Create a new Apache configuration file for Nextcloud:

```
``bash
sudo nano /etc/apache2/sites-available/nextcloud.conf
``
```

Paste the following configuration:

```
``apache
<VirtualHost *:7080>
    ServerName ubuntuserver.tail60802a.ts.net

    DocumentRoot /var/www/nextcloud

    <Directory /var/www/nextcloud/>
        Require all granted
        AllowOverride All
        Options FollowSymLinks MultiViews
    </Directory>

    # Log files
    ErrorLog ${APACHE_LOG_DIR}/nextcloud-error.log
    CustomLog ${APACHE_LOG_DIR}/nextcloud-access.log combined
</VirtualHost>
``
```

Step 5: Set Up Nginx as Reverse Proxy for Nextcloud

Install Nginx if it is not already installed:

```
``bash
sudo apt install nginx
``
```

Create or modify the Nginx configuration file to forward traffic to Apache on port 7080:

```
```bash
sudo nano /etc/nginx/sites-available/nextcloud-reverse-proxy.conf
```
```

Add the following configuration:

```
```nginx
Map for websocket upgrade
map $http_upgrade $connection_upgrade {
 default upgrade;
 "" close;
}

server {
 listen 443 ssl http2;
 server_name ubuntuserver.tail60802a.ts.net;

 # SSL certificate from Tailscale
 ssl_certificate /var/lib/tailscale/certs/ubuntuuserver.tail60802a.ts.net.crt;
 ssl_certificate_key /var/lib/tailscale/certs/ubuntuuserver.tail60802a.ts.net.key;

 client_max_body_size 256M;

 # Reverse Proxy to Apache for Nextcloud
 location /nextcloud/ {
 proxy_pass http://127.0.0.1:7080/; # Apache running Nextcloud
 proxy_http_version 1.1;
 proxy_redirect off;

 # Forward the proper headers
 proxy_set_header Host $host;
 proxy_set_header X-Real-IP $remote_addr;
 proxy_set_header X-Forwarded-For $proxy_add_x_forwarded_for;
 proxy_set_header X-Forwarded-Proto $scheme;
 proxy_set_header X-Forwarded-Port 443;
 }
}
```
```

Step 6: Configure Nextcloud

Edit the `config.php` file located in `/var/www/nextcloud/config/config.php`:

```
```bash
sudo nano /var/www/nextcloud/config/config.php
```
```

Update it with these settings:

```
```php
<?php
$CONFIG = array (
 'instanceid' => 'oczy6e3e8rrj',
 'passwordsalt' => '2lctSDMc/yGWTGPVXh8llyGPzemEIl',
 'secret' => 'IWzspIbZiPCshbMjaM/WCebH/kmZmdIlbahjNrQ9Qxsg8hY4',
 'trusted_domains' =>
 array (
 0 => 'ubuntuserver.tail60802a.ts.net',
),
 'trusted_proxies' =>
 array (
 0 => '127.0.0.1', # Nginx IP
),
 'overwritehost' => 'ubuntuserver.tail60802a.ts.net',
 'overwritewebroot' => '/nextcloud',
 'overwriteprotocol' => 'https',
 'overwritecli.url' => 'https://ubuntuserver.tail60802a.ts.net/nextcloud',
 'datadirectory' => '/var/www/nextcloud/data',
 'dbtype' => 'mysql',
 'dbname' => 'nextcloud',
 'dbhost' => 'localhost',
 'dbtableprefix' => 'oc_',
 'dbuser' => 'ncuser',
 'dbpassword' => 'yourpassword',
 'installed' => true,
);
```
```

Step 7: Enable Apache and Nginx Services

Ensure both services are enabled and running:

```
```bash
sudo systemctl enable apache2
sudo systemctl enable nginx
```
```

'''

Then, start both services:

```
'''bash
sudo systemctl start apache2
sudo systemctl start nginx
'''
```

Step 8: Test the Configuration

Visit `https://ubuntuserver.tail60802a.ts.net/nextcloud` in your browser.

You should be able to access Nextcloud via HTTPS, with Nginx handling the SSL termination and forwarding traffic to Apache.