

Server setup

Will use Ubuntu Server 18.04 LTS for the setup, although any UNIX OS should work with slight modification (depending on package manager etc.).

1. Requirements

Install NGINX and Virtualenv, PCRP and FCGIwrap using:

```
...  
sudo apt update  
sudo apt upgrade  
sudo apt install nginx virtualenv libpcr3 libpcr3-dev fcgiwrap  
...
```

2. Setup

All places where there are groupXX in the commands, it should be replaced with the group number, e.g. group01 for group number 1. This also includes port numbers 40XX and 80XX.

2.1 Django

Clone repo into folder and setup the virtual environment, database and static files. And make sure that www-data owns the data.

```
...  
cd /home/www-data/  
git clone <repo-link> groupXX  
cd groupXX  
virtualenv -p python3 venv  
source venv/bin/activate  
pip install -r requirements.txt  
cd sec  
python manage.py migrate  
printf 'STATIC_ROOT = "/home/www-data/groupXX/static/"\nMEDIA_ROOT =  
"/home/www-data/groupXX/media/"\n' > sec/local_settings.py  
python manage.py collectstatic  
cd /home/www-data/
```

```
chown www-data:www-data -R groupXX
...
```

2.2 Systemd Service

Setup a service to start the uwsgi server (use nano instead of vim if you are not familiar with vim)

```
sudo vim /etc/systemd/system/groupXX.service
...
```

Fill in the file with the content

```
[Unit]
Description=UWSGI daemon for group XX
After=network.target

[Service]
User=www-data
Group=www-data
ExecStart=/home/www-data/groupXX/venv/bin/uwsgi --chdir=/home/www-data/groupXX/sec
-w sec.wsgi:application --processes=2 --uid=33 --gid=33 --harakiri=20
--home=/home/www-data/groupXX/venv --http :80XX --master

[Install]
WantedBy=multi-user.target
...
```

Then enable and start the service use

```
sudo systemctl enable groupXX
sudo systemctl start groupXX
...
```

The service will then start on boot

2.3 NGINX

Add a new site to the nginx configuration

```
...
sudo vim /etc/nginx/sites-available/groupXX
```

...

Fill the file with the following content

...

```
server {
    listen 40XX;
    index index.html;

    location / {
        proxy_redirect off;
        proxy_set_header Host 127.0.0.1;
        proxy_pass http://127.0.0.1:80XX;
    }

    location /static/ {
        root /home/www-data/groupXX/;
    }

    location /media/ {
        root /home/www-data/groupXX/;

        location ~ (\.py|\.sh) {
            gzip off;
            fastcgi_pass unix:/var/run/fcgiwrap.socket;
            include /etc/nginx/fastcgi_params;
            fastcgi_param SCRIPT_FILENAME
/home/www-data/groupXX/$fastcgi_script_name;
        }
    }
}
```

...

Then enable the site and restart nginx use

...

```
sudo ln -s /etc/nginx/sites-available/groupXX /etc/nginx/sites-enabled/groupXX
sudo systemctl restart nginx
```

...