



# NIBIO

NORSK INSTITUTT FOR  
BIOØKONOMI

## VIPSWeb server configuration

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### Table of Contents

Amazon configuration.....	1
Set up Django hosting.....	1
Create deployment environment.....	2
Setting up Apache / mod_wsgi.....	3
Set up memcached.....	4
Static files.....	5
Translation files.....	5
TODO.....	5

### Set up Django hosting

On production server, we use Apache 2.2 with mod\_wsgi for Django. We use Apache for serving static files. Main background source for this is:

<https://docs.djangoproject.com/en/1.6/howto/deployment/wsgi/>

A good alternative is nginx with uWSGI, how-to is here:

[https://uwsgi.readthedocs.org/en/latest/tutorials/Django\\_and\\_nginx.html](https://uwsgi.readthedocs.org/en/latest/tutorials/Django_and_nginx.html)

### Create deployment environment

We create the user that own the deployment environment

```
sudo adduser django-vipsweb
```

Using this documentation: <https://docs.djangoproject.com/en/1.6/intro/install/>

Installed distro's provided virtualenv

```
sudo apt-get install python-virtualenv
```

Remember: A virtualenv is not movable (not easily, anyway), so when creating new site or moving a site, always create a new virtualenv to put your VIPSWeb.

Created virtual environment

```
virtualenv VIPSWeb
```

Entered the virtual environment, created git repo, checked out current code

Cloning repository

```
git clone git@gitlab.nibio.no:VIPs/VIPsWeb.git VIPsWeb
```

```
source bin/activate
```

```
(VIPsWeb)[~]$ cd VIPsWeb/
```

```
(VIPsWeb)[~]$ pip install -r requirements.txt
```

Created local\_settings.py (use local\_settings\_sample.py)

Created the database and superuser

```
python manage.py syncdb
```

Testing application with

```
python manage.py runserver
```

## ***Setting up Apache / mod\_wsgi***

Enabling mod\_wsgi:

```
sudo apt-get install libapache2-mod-wsgi
```

```
sudo a2enmod wsgi
```

Symlinking admin web stuff to static folder

```
foo@bar:~/VIPsWeb/VIPsWeb/VIPsWeb/static$ ln -s ~/VIPsWeb/lib/python2.7/site-packages/django/contrib/admin/static/admin/
```

Sample vhost file for Apache 2.2:

```
<VirtualHost *:80>
    ServerName vipsweb.vips3test.bioforsk.no

    AddDefaultCharset UTF-8

    Alias /robots.txt
/home/django-vipsweb/VIPsWeb/VIPsWeb/VIPsWeb/static/robots.txt
    Alias /favicon.ico
/home/django-vipsweb/VIPsWeb/VIPsWeb/VIPsWeb/static/favicon.ico

    AliasMatch ^/([^\.]*\.css)
/home/django-vipsweb/VIPsWeb/VIPsWeb/VIPsWeb/static/styles/$1

    Alias /media/ /home/django-vipsweb/VIPsWeb/VIPsWeb/VIPsWeb/assets/
    Alias /static/ /home/django-vipsweb/VIPsWeb/VIPsWeb/VIPsWeb/static/
```

```

        <Directory /home/django-vipsweb/VIPSWeb/VIPSWeb/VIPSWeb/static>
            Order allow,deny
            Allow from all
        </Directory>
<Directory /home/django-vipsweb/VIPSWeb/VIPSWeb/VIPSWeb/assets>
    Order allow,deny
    Allow from all
</Directory>

## CUSTOMIZATION ATTEMPTS
WSGIDaemonProcess vipsweb
python-path=/home/django-vipsweb/VIPSWeb/VIPSWeb:/home/django-vipsweb/VIPSWeb/lib/
python2.7/site-packages
WSGIProcessGroup vipsweb

WSGIScriptAlias / /home/django-vipsweb/VIPSWeb/VIPSWeb/VIPSWeb/wsgi.py

<Directory /home/django-vipsweb/VIPSWeb/VIPSWeb/VIPSWeb>
    <Files wsgi.py>
        Order allow,deny
        Allow from all
    </Files>
</Directory>
</VirtualHost>

```

For Apache 2.4, all you need to change is all entries...

```

        Order allow,deny
        Allow from all

```

...to...

Require all granted

Permissions for Apache user

Had to change some permissions:

```

sudo chgrp www-data /home/django-vipsweb/VIPSWeb/VIPSWeb/VIPSWeb
sudo chgrp www-data /home/django-vipsweb/VIPSWeb/VIPSWeb/VIPSWeb/default.sqlite3
sudo chmod 664 /home/django-vipsweb/VIPSWeb/VIPSWeb/VIPSWeb/default.sqlite3

```

## Set up memcached

```
sudo apt-get install memcached
```

In Django virtualenv

```
(VIPSWeb)[]:~/VIPSWeb/VIPSWeb$ pip install python-memcached
```

Adding this config to local\_settings.py:

```
# Caching with memcached
```

```
CACHES = {
    'default': {
        'BACKEND': 'django.core.cache.backends.memcached.MemcachedCache',
        'LOCATION': '127.0.0.1:11211',
    }
}
```

Setting up per-view caching:

For instance in forecasts/views.py, view detail:

```
@cache_page(60 * 15)
```

```
def detail(request, forecast_id):
    [...]
```

This means that output from the view will be cached in 15 minutes

## Static files

We use the staticfiles middleware. All static files are semi-automatically collected into /home/django-vipsweb/static, when issuing this command :

```
python manage.py collectstatic
```

## Translation files

Need gnu gettext

```
sudo apt-get install gettext
```