

1 Arch Linux

1.1 Maintenance

```
#check file size  
du -sh .cache/  
#remove a file  
rm -rt .cache/  
#delete what you don't need in .config file
```

specific maintenance:

```
#check the failed systems  
systemctl --failed  
#check the systemd journal  
sudo journalctl -p 3-xb  
#if the system doesn't boots then ctrl+alt+shift then timeshift -restore  
#then update mirrors  
#clar cache  
  
#then to update the whole system use:  
sudo pacman -Syyu  
#to check system updates  
sudo pacman -Syu  
#if you want to remove all packages in the drive use  
sudo pacman -Scc  
#remove all unwanted dependencies  
paru -Yc  
#remove orphan packages  
sudo pacman -Rns \$(pacman -Qdtq)  
#sudo pacman -Syyy Synchronise data use "mirror1"
```

1.2 Print in arch linux

install packages: usbutils, lusb, cups
use this to make cups usable

```
sudo systemctl enable cups  
sudo systemctl start cups  
localhost:631  
  
lp -d HP_Officejey_Pro_8600]
```

1.3 configure date and time

```
hwclock --set --date = "04/32/2021 19:00:00"  
hwclock -hctosys
```

1.4 Configure wireless

```
#when entering an iso  
iwctl  
#then in the ui  
  
#to list all available devices  
device list
```

```

#to scan networks
station <device> scan

#to get networks
station <device> get-network

#to connect to a network
station <device> connect "<name of network>"

#to check if the connection is stable
ping -c s 8.8.8.8

#don't forget before rebooting the iso run
pacman nmtui

```

from Arch Water Linux

```

# to acces the gui for the internet
nmtui
# solve temporary failure in name resolution
# change the /etc/resolve.conf file to nameserver 8.8.8.8

# restart the resolved daemon
sudo systemctl restart systemd-resolved.service
# check that the daemon is running and active
sudo systemctl status systemd-resolved.service

```

dwm basic configuration

```

#MODKEY + shift + q to restart X server
startx # to start the X server

```

1.5 mount devices

mount usb sticks:

```

#to mount a usb stick
mount /dev/sdb1 /mnt/<destination folder>
#to unmount a sub stick
umount /dev/sdb1

```

mount an android device:

```

#to mount and android device
simple-mtpfs --device 1 tablet/

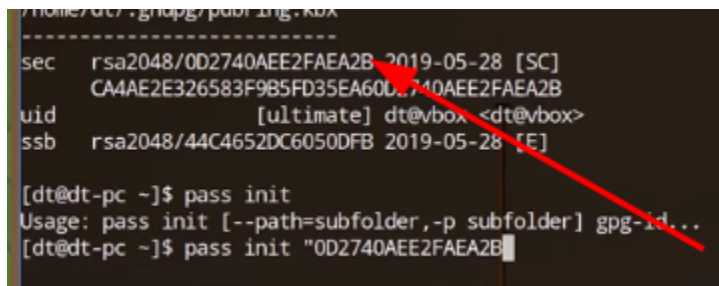
#to unmount an android device
fusermount -u /tablet

```

1.6 import export passwords from pass

export passwords:

```
# to list first the gpg keys
gpg --list-secret-keys --keyid-format LONG
```

A terminal window showing the output of the command 'gpg --list-secret-keys --keyid-format LONG'. The output lists a secret key (sec) and a subkey (ssb) for the user 'dt@vbox'. Below the key listing, the user runs 'pass init' and is prompted with 'Usage: pass init [--path=subfolder,-p subfolder] gpg-id...'. The user then runs 'pass init "0D2740AEE2FAEA2B"'.

```
-----
sec  rsa2048/0D2740AEE2FAEA2B 2019-05-28 [SC]
    CA4AE2E326583F985FD35EA60D2740AEE2FAEA2B
uid          [ultimate] dt@vbox <dt@vbox>
ssb  rsa2048/44C4652DC6050DFB 2019-05-28 [E]

[dt@dt-pc ~]$ pass init
Usage: pass init [--path=subfolder,-p subfolder] gpg-id...
[dt@dt-pc ~]$ pass init "0D2740AEE2FAEA2B"
```

```
# to create the export files
# save this files in a usb and use it later
gpg --output MY_FILENAME_public.gpg --armor --export GPG_PUB_KEY
gpg --output MY_FILENAME_secret.gpg --armor --export-secret-key GPG_PUB_KEY
# in other pc import the gpg keys
gpg --import MY_FILENAME_pub.gpg
gpg --allow-secret-key-import --import MY_FILENAME_sec.gpg
# now copy the .password-store folder from the main machine and paste it into t
```

2 Install python version

```
# download the python version you need from https://www.python.org/downloads/source/
# unpack in the .local/src/pythonversions/pythonVersion.tgz
tar zxvf pythonVersion.tgz
cd pythonVersion
# Install the python version
./configure
make
sudo make install
make clean
# check python version
python[pthon_version] --version
# create a python environment using that python version
python[pthon_version] -m venv venv/
# source the environment
source venv/bin/activate
# for deactivating
deactivate
```

2.1 removing bloatware from android

```
# install the android developer tools
paru -S android-tools
# in your android enable developer options by about phone -> build number 7 times
# then enable usb debugging

# now in your linux sistem type in your terminal
adb devices # to see if device is succesfully connected
```

```
adb shell # to start the shell

# to delete an app
pm uninstall -k --user -0 (package-name)

# to see the names of apps use app inspector from the google store
```

2.2 deploy python django application aws

```
## modify the django project

# settings.py

STATIC_URL = '/static/'
STATIC_ROOT = os.path.join(BASE_DIR, 'static')

MEDIA_URL = '/media/'
MEDIA_ROOT = os.path.join(BASE_DIR, 'media')

## now collect static
source venv/bin/activate

python manage.py collectstatic

### aws
# create an account in aws
# find ec2 and click on launch instance
# select ubuntu server 18 free trial
# see all the instances you are running
# change the name of your instance (on the very left side of the row you can do that)
# you will be prompted to create a new id, so create the new keypair and save it to your linux machine
# the right click on the instance id and click connect
# paste the ssh code in the folder were your keypair is, for example:
ssh -i "password-generator-django.pem" ubuntu@ec2-54-242-121-76.compute-1.amazonaws.com

# now that you are connected sudo update and upgrade the server
sudo apt-get update
sudo apt-get upgrade -y

# you will have to use gnuix gunicorn
python3 --version
python3 -m venv venv/
apt-get install python3-venv
python3 -m venv venv/

ls
# use the environment
source venv/bin/activate

# install django
```

```
pip3 install django
```

```
# install necessary packages for python  
sudo apt install python3-dev build-essential  
sudo apt install libssl  
sudo apt install libssl-dev  
sudo apt install libmysqlclient-dev
```

```
# install the requirements  
pip install -r requirements.txt
```

```
# install django-ckeditor  
pip3 install django-ckeditor
```

```
# git clone your github django project
```

```
git clone url.git
```

```
cd url
```

```
# install modules for deploy  
pip3 install gunicorn  
sudo apt-get install -y nginx
```

```
# start nginx  
sudo nginx
```

```
# configure security groups in for https and http
```

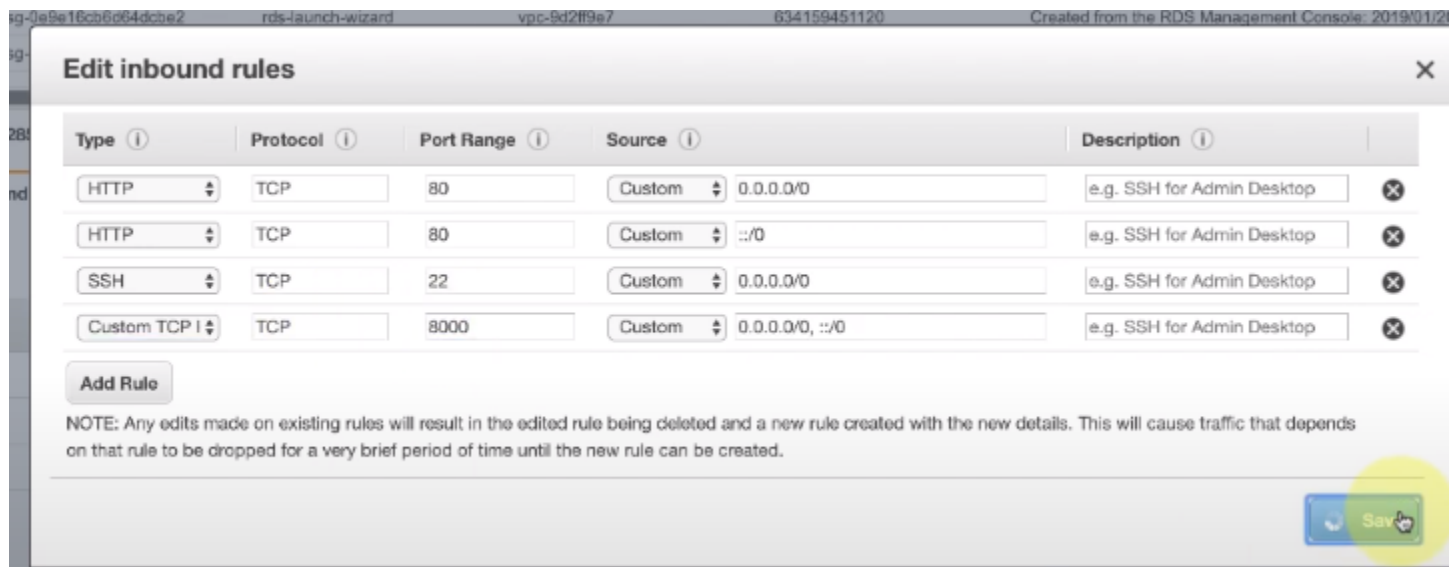
right click(on the instance row) -> networking -> change security group -> see the launch wizard associated

click security groups -> launch wizard n -> inbound -> edit -> add rule

Type ⓘ	Protocol ⓘ	Port Range ⓘ	Source ⓘ
SSH ▾	TCP	22	Custom ▾ 0.0.0.0/0
HTTP ▾	TCP	80	Anywhere ▾ 0.0.0.0/0, ::/0

Add Rule

NOTE: Any edits made on existing rules will result in the edited rule being deleted and a new rule created with the new configuration. Any traffic on that rule to be dropped for a very brief period of time until the new rule can be created.



```
# to connect the gunicorn (which is the wsgi interface)
# tell gunicorn to use the wsgi.py
cd project/project
gunicorn --bind 0.0.0.0:8000 project.wsgi:application
# after this you should be able to access your web app using the link
# use the port 8000 example: google.com:8000

# supervisor makes sure your application is running always
sudo apt-get install -y supervisor
# create a configuration for supervisor
cd /etc/supervisor/conf.d/
touch gunicorn.conf
sudo touch gunicorn.conf

# edit it
sudo nvim gunicorn.conf

# inside the file
[program:gunicorn]
directory=/home/ubuntu/project
command=/home/ubuntu/env/bin/gunicorn --workers 3 --bind unix:/home/ubuntu/project/app.sock
testproject.wsgi:application

autostart=true
autorestart=true
stderr_logfile=/var/log/gunicorn.err.log
stdout_logfile=/var/log/gunicorn.out.log

[group:gunicorn]
programs:gunicorn

# save and exit
# outside the file
sudo mkdir /var/log/gunicorn
sudo supervisorctl reread
```

```

sudo supervisorctl update

sudo supervisorctl status

# nginx configuration
cd ~
cd /etc/nginx/sites-available
sudo touch django.conf
sudo nvim django.conf

# paste the code

server{
    listen 80;
    server_name ec2-3-91-188-252.compute-1.amazonaws.com;
    location / {
        include proxy_params;
        proxy_pass http://unix:/home/ubuntu/personal_portfolio/app.sock;
    }
    location /static/ {
        autoindex on;
        alias /home/ubuntu/personal_portfolio/static/;
    }
    location /media/ {
        root /home/ubuntu/personal_portfolio/;
    }
}

# save and exit
sudo nginx -t

# enable the link
sudo ln django.conf /etc/nginx/sites-enabled/

# save and exit
sudo nginx -t

sudo service nginx restart

#####
## now for setting static files
#####

# in settings.py
STATIC_URL = '/static/'

```

```

# in the html you are doing
{% load staticfiles %}

# in the templates section
'DIRS':[os.path.join(BASE_DIR, 'TestProject/templates')],

# open the server with the keys and cd
nvim /etc/nginx/sites-enabled/django.conf

# append

location /static/ {
    autoindex on;
    alias /home/ubuntu/ProjectFolder/MainProjectFolder/static/;
}

# outside the file
# open the nginx configuration to allow big pictures

cd /etc/nginx
sudo vim nginx.conf

#inside the http or server paste
client_max_body_size 4M;

sudo systemctl reload nginx ;

#####
## now for setup the database with django
#####

# create database
dtaabase section ->
RDS ->
create database ->
mysql ->
only enable options eligible for free usage ->
next ->
select the specific mysql version ->

```


database instance offered on the free tier ->
allocated storage
configure the name,username,password etc
allow public accesibility
choose default existing vpc security groups
database name

now get the latest code in your github

git pull

configure the database for the server

```
DATABASES = {  
    # name  
    'default' : {  
        'ENGINE': "django.db.backends.mysql",  
        'NAME': "database_name",  
        'USER': "database_user",  
        # change this manually in the server  
        "PASSWORD": "*****",  
        # click on the database, check endpoint & port for configuring  
        'HOST', 'host',  
        'PORT': '12312'  
    }  
}
```

activate the environment

source venv/bin/activate

install all the modules in the requirements

pip install django-mysql

make the migrations

python manage.py makemigrations name_of_main_app

python manage.py migrate

restart the server

sudo supervisorctl reload

sudo service nginx restart