

Preparing your Ubuntu system for MailVault

These are general instructions, meant to serve as a recommended starting step, but may be adapted to specific requirements.

Assumptions

- Hardware sizing has been done and the appropriate hardware is in place.
- The use of RAID is highly recommended.

General Setup

- OS and indexes will reside on the server disks.
- Email may be stored on the server disks, or, will be on external storage (mounted over NFS).

Operating System

In general, the Server versions are recommended. In case a native GUI for the OS is needed, the Desktop variants may be used.

- Ubuntu Server 18.04/20.04 (LTS), 64-bit
- Ubuntu/Kubuntu 18.04/20.04(LTS), Desktop, 64-bit

Partition Structure

The partitions could be of type **ext4**.

- */boot* - 1 GB
- *Swap* - 4 GB
- */* - 100 GB
- */mvddata* - All the remaining space (ensure it is enough to store your email)

Install Python 3.8.11

1. Prerequisites

```
sudo apt-get update
```

```
sudo apt-get install build-essential
sudo apt-get install zlib1g-dev libncurses5-dev
sudo apt-get install libgdbm-dev libssl-dev libreadline-dev
sudo apt-get install libffi-dev libsqlite3-dev wget libbz2-dev checkinstall
sudo apt install libreadline-gplv2-dev libncursesw5-dev
sudo apt install tk-dev libc6-dev python-dev libldap2-dev libsasl2-dev
sudo apt install libxml2-dev libxslt1-dev libjpeg-dev gdb
sudo apt-get install libpoppler-cpp-dev pkg-config
```

2. Download Python

```
cd /usr/src or /opt
sudo wget
https://www.python.org/ftp/python/3.8.11/Python-3.8.11.tgz
sudo tar -xf Python-3.8.11.tgz
```

3. Compile the source

```
cd Python-3.8.11
sudo ./configure --enable-optimizations
sudo make
sudo make altinstall
```

4. Check the version

```
python3.8 -V
# This should show Python 3.8.11
```

User Creation and File System Structure

- Create a user called 'mailvault', with home directory */home/mailvault*

```
sudo adduser mailvault
```

- Next, change the ownership of */mvddata* to user 'mailvault'

```
sudo chown -R mailvault.mailvault /mvddata
```

Later on, MailVault will be installed in */home/mailvault*, and MailVault related data will reside under */mvddata*.

Other recommended settings

Edit */etc/sysctl.conf* and add the following line to the end of the file:

```
fs.file-max = 65536
```

Edit */etc/security/limits.conf* and add the following lines to the end of the file:

```
soft nproc 65536
hard nproc 65536
soft nofile 65536
hard nofile 65536
```

Check the settings are in effect with the following command:

```
ulimit -a
```

In the output you should see the following line:

```
open files (-n) 65535
```

Conclusion

This completes the basic preparation of your Linux system, after which MailVault can be installed and configured.

In case you need any clarifications, feel free to get in touch with us.