

Install Mealie on Debian

01/29/2022 12:03 PM - Daniel Curtis

Status:	In Progress	Start date:	01/29/2022
Priority:	Normal	Due date:	
Assignee:	Daniel Curtis	% Done:	0%
Category:	Web Server	Estimated time:	2.00 hours
Target version:	Debian	Spent time:	0.00 hour

Description

This is a guide for installing Mealie on Debian. Using the officially supported Docker image will likely be easier, this is just fun.

Prepare the Environment

- Make sure the system is up to date:

```
apt update && apt upgrade
```

- Install some prerequisites:

```
apt install nodejs npm python3 python3-dev python3-venv python3-pip python3-cryptography git curl build-essential libpq-dev libwebp-dev libsasl2-dev libldap2-dev libssl-dev gnupg gnupg2 gnupg1 debian-keyring debian-archive-keyring apt-transport-https libbluetooth-dev libbz2-dev libc6-dev libexpat1-dev libffi-dev libgdbm-dev liblzma-dev libncursesw5-dev libreadline-dev libsquid-dev libssl-dev libxslt1-dev libxml2-dev libjpeg-dev make tk-dev uuid-dev wget xz-utils zlib1g-dev rustc
```

- Create a user for mealie:

```
useradd -u 911 -U -d /app -s /bin/bash abc
mkdir /app
mkdir /opt/poetry
mkdir /opt/pysetup
chown abc:abc /app
chown abc:abc /opt/pysetup
chown abc:abc /opt/poetry
su - abc
```

- Set a few environment variables:

```
echo 'export PYTHONUNBUFFERED=1 ' >> ~/.bashrc
echo 'export PYTHONDONTWRITEBYTECODE=1' >> ~/.bashrc
echo 'export PIP_NO_CACHE_DIR=off' >> ~/.bashrc
echo 'export PIP_DISABLE_PIP_VERSION_CHECK=on' >> ~/.bashrc
echo 'export PIP_DEFAULT_TIMEOUT=100' >> ~/.bashrc
echo 'export POETRY_HOME="/opt/poetry"' >> ~/.bashrc
echo 'export POETRY_VIRTUALENVS_IN_PROJECT=true' >> ~/.bashrc
echo 'export POETRY_NO_INTERACTION=1' >> ~/.bashrc
echo 'export PYSETUP_PATH="/opt/pysetup"' >> ~/.bashrc
echo 'export VENV_PATH="/opt/pysetup/.venv"' >> ~/.bashrc
source ~/.bashrc
```

- Install python poetry:

```
cd $PYSETUP_PATH
curl -sSL https://raw.githubusercontent.com/python-poetry/poetry/master/install-poetry.py | python3 -
```

- Add local bin execution path:

```
echo 'export PATH="/opt/poetry/bin:/opt/pysetup/.venv/bin:$PATH"' >> ~/.bashrc
source ~/.bashrc
```

Install Mealie

- Download mealie:

```
mkdir -p /app/git && cd /app/git
git clone https://github.com/hay-kot/mealie.git
```

Frontend

- Setup the frontend directory:

```
/app
cp git/mealie/frontend/package*.json .
npm install
cp -r git/mealie/frontend/* .
npm run build
```

Backend

- Create and prep a temporary build directory:

```
cd $PYSETUP_PATH
cp /app/git/mealie/poetry.lock .
cp /app/git/mealie/pyproject.toml .
```

- Build mealie venv:

```
poetry install -E pgsqll --no-dev
```

- Build mealie backend:

```
cd /app
cp -r git/mealie .
cp mealie/poetry.lock .
cp mealie/pyproject.toml .
sh /opt/pysetup/.venv/bin/activate
poetry install
```

- Initialize the database:

```
poetry run python /app/mealie/db/init_db.py
poetry run python /app/mealie/services/image/minify.py
```

- Run the api server:

```
cp /app/git/mealie/gunicorn_conf.py /app/  
uvicorn mealie.app:app --host 0.0.0.0 --port 9000
```

nginx proxy

- Install nginx;

```
apt install nginx
```

systemd service

- Create the mealie systemd unit file:

```
sudo nano /etc/systemd/system/mealie.service
```

- Add the following:

```
[Service]  
PermissionsStartOnly = true  
User = abc  
Group = abc  
WorkingDirectory = /app  
ExecStart = /usr/bin/sh -c 'cd /app && sh /opt/pysetup/.venv/bin/activate && /opt/pysetup/  
.venv/bin/uvicorn mealie.app:app --host 0.0.0.0 --port 9000'  
PrivateTmp = true  
  
[Install]  
WantedBy = multi-user.target
```

- Set the unit file permissions and reload systemd:

```
chmod 755 /etc/systemd/system/mealie.service  
systemctl daemon-reload
```

- Start and enable mealie at boot:

```
systemctl enable mealie  
systemctl start mealie
```

Resources

- <https://github.com/hay-kot/mealie>
- <https://hay-kot.github.io/mealie/contributors/developers-guide/starting-dev-server/>
- <https://hay-kot.github.io/mealie/documentation/getting-started/install/>

History

#1 - 01/29/2022 04:33 PM - Daniel Curtis

- Description updated

#2 - 01/29/2022 06:02 PM - Daniel Curtis

- Status changed from New to In Progress

- Description updated

#3 - 01/30/2022 09:52 AM - Daniel Curtis

- Description updated

#4 - 01/30/2022 05:23 PM - Daniel Curtis

- Description updated

#5 - 01/30/2022 08:06 PM - Daniel Curtis

- Description updated

#6 - 01/30/2022 08:39 PM - Daniel Curtis

- Description updated

#7 - 01/30/2022 11:38 PM - Daniel Curtis

- Description updated