

Installing Open WebUI 5.20 on Ubuntu 22.04

- Install Ubuntu 24.04. (Note to have sufficient storage for the models)
- Update the ubuntu system to ensure all are up to date before installig the open-webui

```
sudo apt update -y && sudo apt upgrade -y
```

Install the Ollama

1. Download the installation script for Ollama

```
wget https://ollama.ai/install.sh
```

2. Make the script executable

```
sudo chmod +x install.sh
```

3. Run the installation script of Ollama

```
sudo ./install.sh
```

```
alfreddgreat@HPZ640:~$ sudo ./install.sh
>>> Installing ollama to /usr/local
>>> Downloading Linux amd64 bundle
##### 100,0%
>>> Creating ollama user...
>>> Adding ollama user to render group...
>>> Adding ollama user to video group...
>>> Adding current user to ollama group...
>>> Creating ollama systemd service...
>>> Enabling and starting ollama service...
Created symlink /etc/systemd/system/default.target.wants/ollama.service → /etc/systemd/system/ollama.service.
>>> NVIDIA GPU installed.
```

4. Enable the Ollama service to start at boot using systemctl.

```
sudo systemctl enable ollama
```

5. Start the Ollama service using systemctl.

```
sudo systemctl start ollama
```

6. Check if the Ollama service is running.

```
sudo systemctl status ollama
```

```
● ollama.service - Ollama Service
   Loaded: loaded (/etc/systemd/system/ollama.service; enabled; vendor preset: enabled)
   Active: active (running) since Sun 2025-03-16 18:11:14 CET; 3min 16s ago
     Main PID: 50025 (ollama)
       Tasks: 16 (limit: 270579)
      Memory: 23.7M
         CPU: 228ms
    CGroup: /system.slice/ollama.service
            └─50025 /usr/local/bin/ollama serve

mar 16 18:11:14 HPZ640 systemd[1]: Started Ollama Service.
mar 16 18:11:14 HPZ640 ollama[50025]: Couldn't find '/usr/share/ollama/.ollama/id_ed25519'. Generating new private k
mar 16 18:11:14 HPZ640 ollama[50025]: Your new public key is:
mar 16 18:11:14 HPZ640 ollama[50025]: ssh-ed25519 AAAAC3NzaC1lZDI1NTE5AAAAIAFz7VY1aZl0Q1Ip2v8l3xaB8b9cRpb0UDA98hKxF0>
mar 16 18:11:14 HPZ640 ollama[50025]: 2025/03/16 18:11:14 routes.go:1230: INFO server config env="map[CUDA_VISIBLE_D
mar 16 18:11:14 HPZ640 ollama[50025]: time=2025-03-16T18:11:14.416+01:00 level=INFO source=images.go:432 msg="total >
mar 16 18:11:14 HPZ640 ollama[50025]: time=2025-03-16T18:11:14.416+01:00 level=INFO source=images.go:439 msg="total >
mar 16 18:11:14 HPZ640 ollama[50025]: time=2025-03-16T18:11:14.417+01:00 level=INFO source=routes.go:1297 msg="Liste
mar 16 18:11:14 HPZ640 ollama[50025]: time=2025-03-16T18:11:14.417+01:00 level=INFO source=gpu.go:217 msg="looking f
mar 16 18:11:14 HPZ640 ollama[50025]: time=2025-03-16T18:11:14.645+01:00 level=INFO source=types.go:130 msg="inferen
~
```

7. Install models for Ollama.

model llama3:8b

```
sudo ollama pull llama3:8b
```

```
alfreddgreat@HPZ640:~$ sudo ollama pull llama3:8b
pulling manifest
pulling 6a0746a1ec1a... 100% 4.7 GB
pulling 4fa551d4f938... 100% 12 KB
pulling 8ab4849b038c... 100% 254 B
pulling 577073ffcc6c... 100% 110 B
pulling 3f8eb4da87fa... 100% 485 B
verifying sha256 digest
writing manifest
success
```

model mistral

```
sudo ollama pull mistral
```

```
alfreddgreat@HPZ640:~$ sudo ollama pull mistral
pulling manifest
pulling ff82381e2bea... 100% 4.1 GB
pulling 43070e2d4e53... 100% 11 KB
pulling 491dfa501e59... 100% 801 B
pulling ed11eda7790d... 100% 30 B
pulling 42347cd80dc8... 100% 485 B
verifying sha256 digest
writing manifest
success
```

model llama3:70b

```
sudo ollama pull llama3:70b
```

Install the Open WebUI using python 3.11

1. Install the python 3.11.

```
sudo apt install python3.11
```

```
alfreddgreat@HPZ640:~$ sudo apt install python3.11
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following additional packages will be installed:
  libpython3.11-minimal libpython3.11-stdlib python3.11-minimal
Suggested packages:
  python3.11-venv python3.11-doc binfmt-support
The following NEW packages will be installed:
  libpython3.11-minimal libpython3.11-stdlib python3.11 python3.11-minimal
0 upgraded, 4 newly installed, 0 to remove and 0 not upgraded.
Need to get 5.615 kB of archives.
After this operation, 21,5 MB of additional disk space will be used.
Do you want to continue? [Y/n] Y
```

2. Install the python3-pip

```
sudo python3.11 -m pip install open-webui
```

```
alfreddgreat@HPZ640:~$ sudo apt install python3-pip
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following additional packages will be installed:
  javascript-common libexpat1-dev libjs-jquery libjs-sphinxdoc libjs-underscore libpython3-dev libpython3.10-dev
  python3-dev python3-distutils python3-setuptools python3-wheel python3.10-dev zlib1g-dev
Suggested packages:
  apache2 | lighttpd | httpd python-setuptools-doc
The following NEW packages will be installed:
  javascript-common libexpat1-dev libjs-jquery libjs-sphinxdoc libjs-underscore libpython3-dev libpython3.10-dev
  python3-dev python3-distutils python3-pip python3-setuptools python3-wheel python3.10-dev zlib1g-dev
0 upgraded, 14 newly installed, 0 to remove and 0 not upgraded.
Need to get 8.015 kB of archives.
After this operation, 34,2 MB of additional disk space will be used.
Do you want to continue? [Y/n]
```

3. Install Open WebUI using python 3.11.

```
sudo python3.11 -m pip install open-webui
```

```
Collecting aiosignal>=1.1.2
  Downloading aiosignal-1.3.2-py2.py3-none-any.whl (7.6 kB)
Collecting frozenlist>=1.1.1
  Downloading frozenlist-1.5.0-cp311-cp311-manylinux_2_5_x86_64.manylinux1_x86_64.manylinux2014_x86_64.whl (274 kB)
  ━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━ 274.9/274.9 KB 42.7 MB/s eta 0:00:00
Collecting propcache>=0.2.0
  Downloading propcache-0.3.0-cp311-cp311-manylinux_2_17_x86_64.manylinux2014_x86_64.whl (231 kB)
  ━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━ 231.3/231.3 KB 38.4 MB/s eta 0:00:00
Collecting attrs>=17.3.0
  Downloading attrs-25.3.0-py3-none-any.whl (63 kB)
  ━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━ 63.8/63.8 KB 13.2 MB/s eta 0:00:00
Collecting yarl<2.0,>=1.17.0
  Downloading yarl-1.18.3-cp311-cp311-manylinux_2_17_x86_64.manylinux2014_x86_64.whl (344 kB)
  ━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━ 344.1/344.1 KB 37.3 MB/s eta 0:00:00
Collecting aiohappyeyeballs>=2.3.0
  Downloading aiohappyeyeballs-2.6.1-py3-none-any.whl (15 kB)
Collecting multidict<7.0,>=4.5
  Downloading multidict-6.1.0-cp311-cp311-manylinux_2_17_x86_64.manylinux2014_x86_64.whl (129 kB)
  ━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━ 129.0/129.0 KB 16.2 MB/s eta 0:00:00
Collecting typing-extensions>=4
  Downloading typing_extensions-4.12.2-py3-none-any.whl (37 kB)
Requirement already satisfied: Mako in /usr/lib/python3/dist-packages (from alembic==1.14.0->open-webui) (1.1.3)
Requirement already satisfied: pytz in /usr/lib/python3/dist-packages (from apscheduler==3.10.4->open-webui) (2022.1)
Requirement already satisfied: six>=1.4.0 in /usr/lib/python3/dist-packages (from apscheduler==3.10.4->open-webui) (1.16.0)
Collecting tzlocal!=3.*,>=2.0
```

4. Install the python packages Pillow and pyopenssl

```
sudo python3.11 -m pip install -U Pillow pyopenssl
```

```
alfreddgreat@HPZ640:~$ sudo python3.11 -m pip install -U Pillow pyopenssl
Requirement already satisfied: Pillow in /usr/lib/python3/dist-packages (9.0.1)
Collecting Pillow
  Downloading pillow-11.1.0-cp311-cp311-manylinux_2_28_x86_64.whl (4.5 MB)
    _____ 4.5/4.5 MB 41.5 MB/s eta 0:00:00
Collecting pyopenssl
  Downloading pyOpenSSL-25.0.0-py3-none-any.whl (56 kB)
    _____ 56.5/56.5 KB 10.5 MB/s eta 0:00:00
Requirement already satisfied: typing-extensions>=4.9 in /usr/local/lib/python3.11/dist-packages (from pyopenssl) (4.12.2)
Requirement already satisfied: cryptography<45,>=41.0.5 in /usr/local/lib/python3.11/dist-packages (from pyopenssl) (44.0.2)
Requirement already satisfied: cffi>=1.12 in /usr/local/lib/python3.11/dist-packages (from cryptography<45,>=41.0.5->pyopenssl) (1.17.1)
Requirement already satisfied: pycparser in /usr/local/lib/python3.11/dist-packages (from cffi>=1.12->cryptography<45,>=41.0.5->pyopenssl) (2.22)
Installing collected packages: Pillow, pyopenssl
  Attempting uninstall: Pillow
    Found existing installation: Pillow 9.0.1
    Not uninstalling pillow at /usr/lib/python3/dist-packages, outside environment /usr
    Can't uninstall 'Pillow'. No files were found to uninstall.
Successfully installed Pillow-11.1.0 pyopenssl-25.0.0
```

5. Run the open-webui to test if it is working and then stop it with "**CTRL + C**".

```
sudo open-webgui serve
```

```
INFO [open_webui.env] Embedding model set: sentence-transformers/all-MiniLM-L6-v2
/usr/local/lib/python3.11/dist-packages/pydub/utils.py:170: RuntimeWarning: Couldn't find ffmpeg or avconv - defaulting to ffmpeg, but may not work
  warn("Couldn't find ffmpeg or avconv - defaulting to ffmpeg, but may not work", RuntimeWarning)
WARNI [langchain_community.utils.user_agent] USER_AGENT environment variable not set, consider setting it to identify your requests.
```

OPEN WEBUI

v0.5.20 - building the best open-source AI user interface.

<https://github.com/open-webui/open-webui>

.gitattributes: 100%	1.23k/1.23k [00:00<00:00, 4.48MB/s]
config.json: 100%	190/190 [00:00<00:00, 861kB/s]
README.md: 100%	10.5k/10.5k [00:00<00:00, 29.3MB/s]
data_config.json: 100%	39.3k/39.3k [00:00<00:00, 53.5MB/s]
modules.json: 100%	349/349 [00:00<00:00, 1.58MB/s]
config.json: 100%	612/612 [00:00<00:00, 2.55MB/s]
config_sentence_transformers.json: 100%	116/116 [00:00<00:00, 610kB/s]
model_04.onnx: 100%	45.2M/45.2M [00:01<00:00, 25.9MB/s]
model_02.onnx: 100%	90.3M/90.3M [00:02<00:00, 32.1MB/s]
model_quint8_avx2.onnx: 100%	23.0M/23.0M [00:00<00:00, 34.3MB/s]
model_01.onnx: 100%	90.4M/90.4M [00:04<00:00, 18.2MB/s]
openvino_model.bin: 100%	90.3M/90.3M [00:01<00:00, 52.6MB/s]
model_qint8_arm64.onnx: 100%	23.0M/23.0M [00:05<00:00, 4.59MB/s]
openvino_model_qint8_quantized.xml: 100%	368k/368k [00:00<00:00, 2.11MB/s]
model_03.onnx: 100%	90.3M/90.3M [00:06<00:00, 14.6MB/s]
openvino_model_qint8_quantized.bin: 100%	22.9M/22.9M [00:00<00:00, 33.4MB/s]
sentence_bert_config.json: 100%	53.0/53.0 [00:00<00:00, 230kB/s]
special_tokens_map.json: 100%	112/112 [00:00<00:00, 561kB/s]
openvino_model.xml: 100%	211k/211k [00:00<00:00, 1.93MB/s]
tokenizer_config.json: 100%	350/350 [00:00<00:00, 1.70MB/s]
tokenizer.json: 100%	466k/466k [00:00<00:00, 1.88MB/s]

6. Create a service for open-webui **openwebui.service**,

```
sudo nano /usr/lib/systemd/system/openwebui.service
```

7. Paste the following information in the file openwebui.service.

```
[Unit]
Description=Open WebUI Service
After=network.target

[Service]
Type=simple
ExecStart=open-webui serve
ExecStop=/bin/kill -HUP $MAINPID

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

8. Reload the daemon.

```
sudo systemctl daemon-reload
```

9. Enable the openwebui.service using the systemctl.

```
sudo systemctl enable openwebui.service
```

10. Start the openwebui service.

```
sudo systemctl start openwebui
```

11. Check the status of the Open WebUI service.

```
sudo systemctl status openwebui
```

```
alfreddgreat@HPZ640:~$ sudo systemctl enable openwebui.service
Created symlink /etc/systemd/system/multi-user.target.wants/openwebui.service → /lib/systemd/system/openwebui.service.
alfreddgreat@HPZ640:~$ sudo systemctl start openwebui
alfreddgreat@HPZ640:~$ sudo systemctl status openwebui
● openwebui.service - Open WebUI Service
   Loaded: loaded (/lib/systemd/system/openwebui.service; enabled; vendor preset: enabled)
   Active: active (running) since Sun 2025-03-16 19:15:14 CET; 1min 25s ago
     Main PID: 52639 (open-webui)
        Tasks: 119 (limit: 270579)
      Memory: 602.3M
         CPU: 20.571s
    CGroup: /system.slice/openwebui.service
            └─52639 /usr/bin/python3.11 /usr/local/bin/open-webui serve

mar 16 19:15:23 HPZ640 open-webui[52639]:
mar 16 19:15:23 HPZ640 open-webui[52639]:
mar 16 19:15:23 HPZ640 open-webui[52639]:
mar 16 19:15:23 HPZ640 open-webui[52639]:
mar 16 19:15:23 HPZ640 open-webui[52639]:
mar 16 19:15:23 HPZ640 open-webui[52639]: v0.5.20 - building the best open-source AI user interface.
mar 16 19:15:23 HPZ640 open-webui[52639]: https://github.com/open-webui/open-webui
mar 16 19:15:23 HPZ640 open-webui[52639]: [149B blob data]
mar 16 19:15:23 HPZ640 open-webui[52639]: INFO: Started server process [52639]
mar 16 19:15:23 HPZ640 open-webui[52639]: INFO: Waiting for application startup.
mar 16 19:15:23 HPZ640 open-webui[52639]: 2025-03-16 19:15:23.928 | INFO | open_webui.utils.logger:start_logger:
lines 1-20/20 (END)
```

Install nginx to proxy the port 8080 to port 80 or 443.

1. Install the Nginx.

```
sudo apt install nginx -y
```

2. Start the nginx service.

```
sudo systemctl start nginx
```

3. Create a site configuration in the site-available directory of nginx, `/etc/nginx/sites-available/openwebui.conf`.

```
sudo vim /etc/nginx/sites-available/openwebui.conf
```

4. Paste the following data and then save the file.

```
server {
    listen 80;

    server_name openwebuiHP.homehaktrak.local openwebuiHP;

    access_log /var/log/nginx/openwebui_access.log;
```

```
error_log /var/log/nginx/openwebui_error.log;

location / {
    proxy_pass http://127.0.0.1:8080;

    client_max_body_size 300M;

    proxy_http_version 1.1;
    proxy_set_header Upgrade $http_upgrade;
    proxy_set_header Connection "upgrade";
    proxy_set_header Host $host;
    proxy_set_header X-Real-IP $remote_addr;
    proxy_set_header X-Forwarded-For $proxy_add_x_forwarded_for;
    proxy_set_header X-Forwarded-Proto $scheme;

    proxy_read_timeout 300;
    proxy_connect_timeout 300;
    proxy_send_timeout 300;

    # (Optional) Disable proxy buffering for better streaming response from models
    proxy_buffering off;

}
}
```

5. Make a soft link for the openwebui.conf file from the site-available to the site-enabled

```
sudo ln -s /etc/nginx/sites-available/openwebui.conf /etc/nginx/sites-enabled/openwebui.conf
```

6. Test the configuration and reload the nginx service.

```
sudo nginx -t && sudo systemctl restart nginx
```

7. Before accessing the IP for port 80, we have to edit the /etc/hosts file.

```
sudo nano /etc/hosts
```

8. Paste the following in the /etc/hosts file.

```
IP_OF_SERVER openwebui openwebui.homehaktrak.local
```



```
127.0.0.1      localhost
127.0.1.1      HPZ640

# The following lines are desirable for IPv6 capable hosts
::1          ip6-localhost ip6-loopback
fe00::0      ip6-localnet
ff00::0      ip6-mcastprefix
ff02::1      ip6-allnodes
ff02::2      ip6-allrouters

IP_OF_SERVER  openwebui openwebui.homehaktrak.local
```

9. test the configuration and if there are no errors then the service will be restarted.

```
sudo nginx -t && sudo systemctl restart nginx
```

Using the browser preferred

1. Openn the browser.



2. Press "**Get Started**", and the next slide will ask a "Name", "email", and a "Password".

Get started with Open WebUI

① Open WebUI does not make any external connections, and your data stays securely on your locally hosted server.

Name

Enter Your Full Name



Email

Enter Your Email



Password

Enter Your Password

Create Admin Account

3. Press Create "**Admin Account**".

Get started with Open WebUI

① Open WebUI does not make any external connections, and your data stays securely on your locally hosted server.

Name

alfredonacino



Email

alfredo@nacino.net



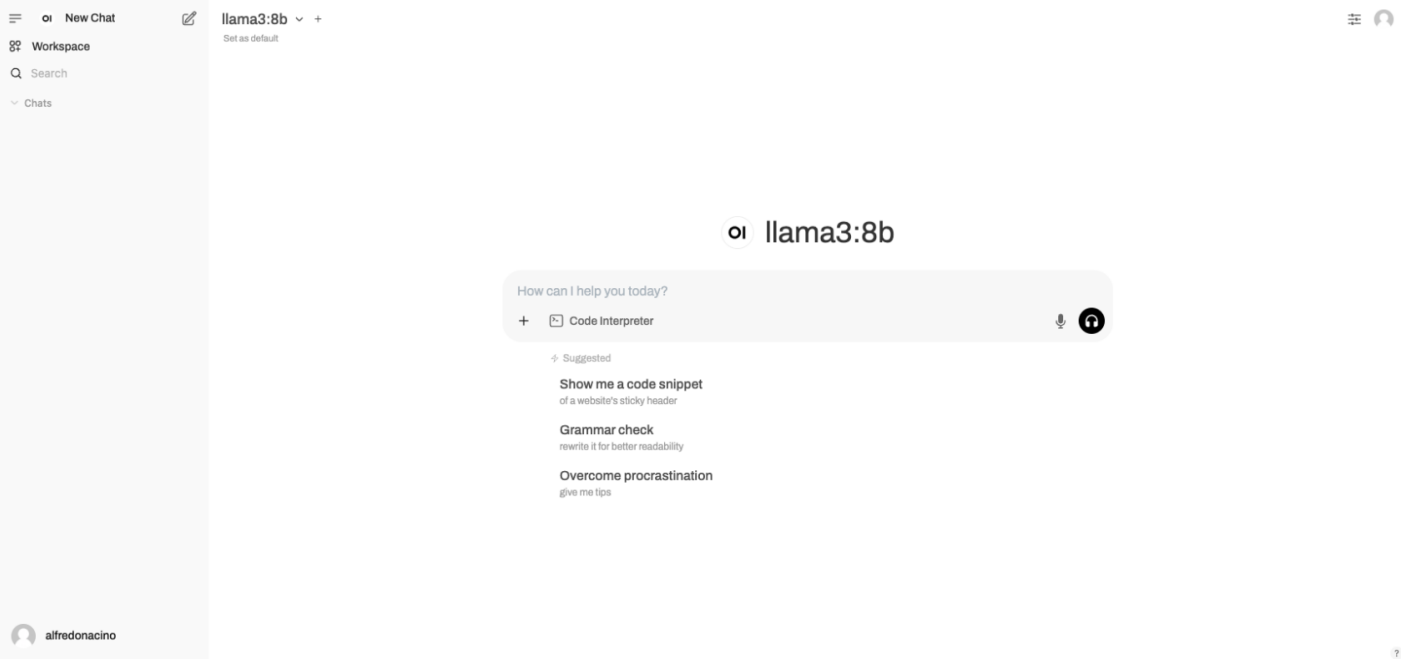
Password

.....|



Create Admin Account

4. Start the webui.



Revision #19
Created 27 February 2025 21:14:49 by Admin
Updated 16 March 2025 19:26:49 by Admin