

# Open WebUI

Installing Open WebUI on Linux Machines

- [Installing Open WebUI 5.20 on Ubuntu 22.04](#)

# 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 installing 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 AAAAC3NzaC1lZDI1NTE5AAAAIAFz7VY1aZl0Q1Ip2v8l3xaB8b9crPb0UDA98hKxFO>
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% [REDACTED] 4.7 GB
pulling 4fa551d4f938... 100% [REDACTED] 12 KB
pulling 8ab4849b038c... 100% [REDACTED] 254 B
pulling 577073ffcc6c... 100% [REDACTED] 110 B
pulling 3f8eb4da87fa... 100% [REDACTED] 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.

llama3:8b

How can I help you today?

+ Code Interpreter



Suggested

Show me a code snippet  
of a website's sticky header

Grammar check  
rewrite it for better readability

Overcome procrastination  
give me tips