Open WebUI

| Demo Environment

Development board: Jetson Orin series motherboard

SSD: 128G

| Tutorial Applicability

Motherboard model	Support
Jetson Orin NX 16GB	√
Jetson Orin NX 8GB	√
Jetson Orin Nano 8GB	√
Jetson Orin Nano 4GB	√

Open WebUI is an open source project that aims to provide an easy-to-use user interface (UI) for managing and monitoring open source software and services.

```
When using Open WebUI, there is a high probability that the dialogue will be
unresponsive or timeout. You can try to restart Open WebUI or switch to the
Ollama tool to run the model!
```

Environment requirements

Host and Conda installation of Open WebUI: Node.js >= 20.10, Python = 3.11:

Environment construction method	Difficulty (relatively)
Host	High
Conda	Medium
Docker	Low

Tutorial demonstrates Docker installation of Open WebUI.

Docker construction

Official installation of Docker

If Docker is not installed, you can use the script to install Docker in one click.

> Domestic users may not be able to install Docker through official methods. We recommend using Alibaba Cloud to install Docker or using our image directly.

- Update the local package list

```
sudo apt update
```

- Upgrade the installed package

```
sudo apt upgrade
```

- Download and run the script

Download the get-docker.sh file and save it in the current directory.

```
sudo apt install curl
```

```
curl -fsSL https://get.docker.com -o get-docker.sh
```

Use sudo privileges to run the get-docker.sh script file.

```
sudo sh get-docker.sh
```

Install Docker on Alibaba Cloud

If you cannot install it yourself, please use the image we provide.

- Update the local package list

```
sudo apt update
```

- Install the required software

```
sudo apt install apt-transport-https ca-certificates curl gnupg2 lsb-release software-properties-common
```

- Add the GPG key of the software source

```
curl -fsSL https://mirrors.aliyun.com/docker-ce/linux/ubuntu/gpg | sudo gpg --
dearmor -o /usr/share/keyrings/docker-archive-keyring.gpg
```

- Add Alibaba Cloud mirror software source

```
echo "deb [arch=arm64 signed-by=/usr/share/keyrings/docker-archive-keyring.gpg]
https://mirrors.aliyun.com/docker-ce/linux/ubuntu bionic stable" | sudo tee
/etc/apt/sources.list.d/docker.list > /dev/null
```
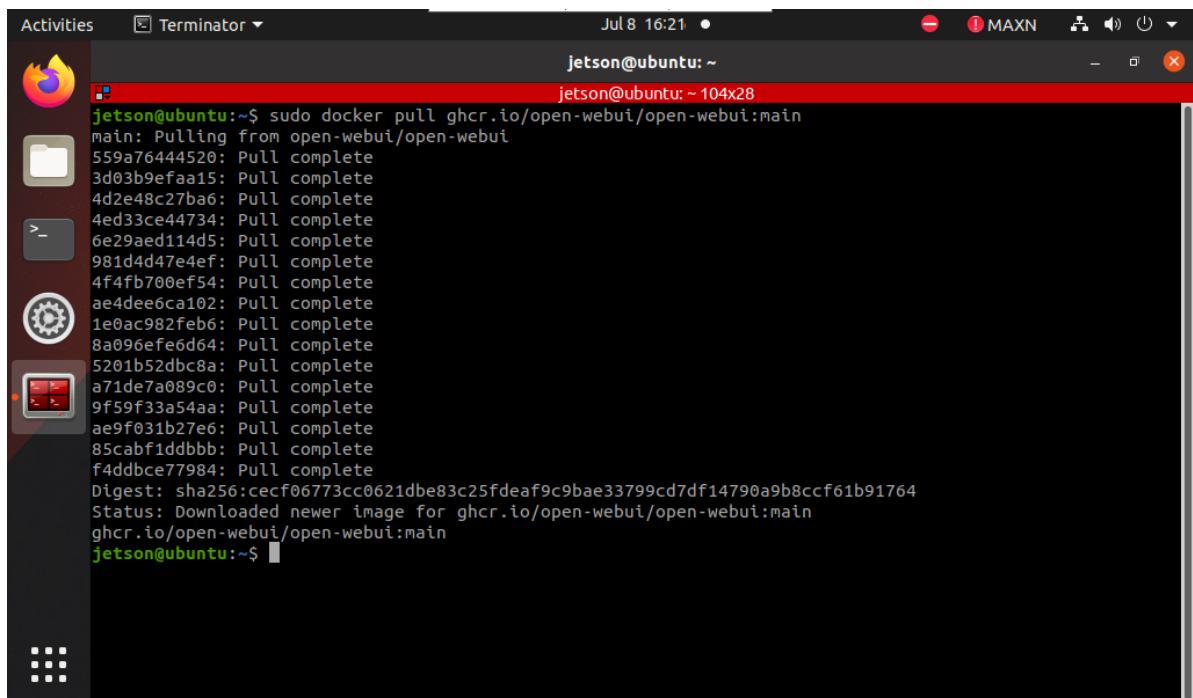
- Install Docker

```
sudo apt update
sudo apt install docker-ce docker-ce-cli containerd.io docker-compose-plugin
```

Open WebUI installation

For systems with Docker installed, you can directly enter the following command in the terminal:
The image is the result of the pull

```
sudo docker pull ghcr.io/open-webui/open-webui:main
```


Open WebUI operation

Enter the following command in the terminal to start the specified Docker:

```
sudo docker run --network=host -v open-webui:/app/backend/data -e
OLLAMA_BASE_URL=http://127.0.0.1:11434 --name open-webui --restart always
ghcr.io/open-webui/open-webui:main
```

After successful startup, use the following URL to access in the browser:

```
http://localhost:8080/
```

Administrator account

For the first time, you need to register an account yourself. This account is an administrator account. You can fill in the information as required!
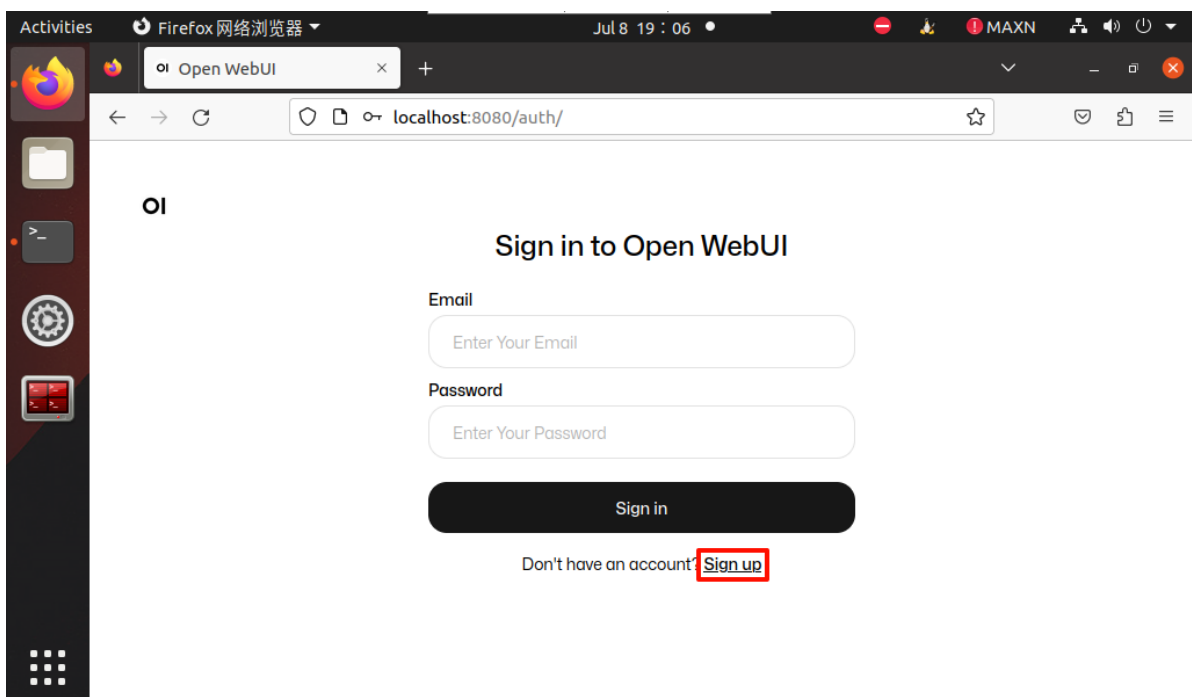
```
Since all the contents of our mirror have been set up and tested, users can log
in directly using our registered account:
Username: admin
Email: admin@qq.com
Password: admin
```
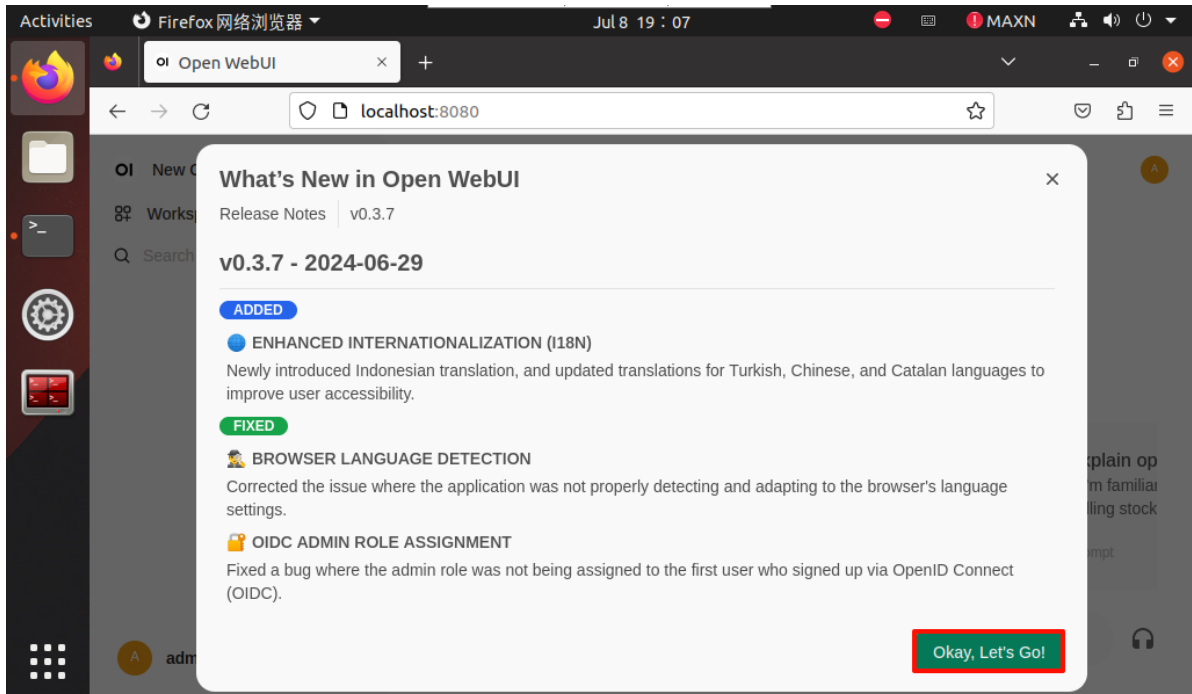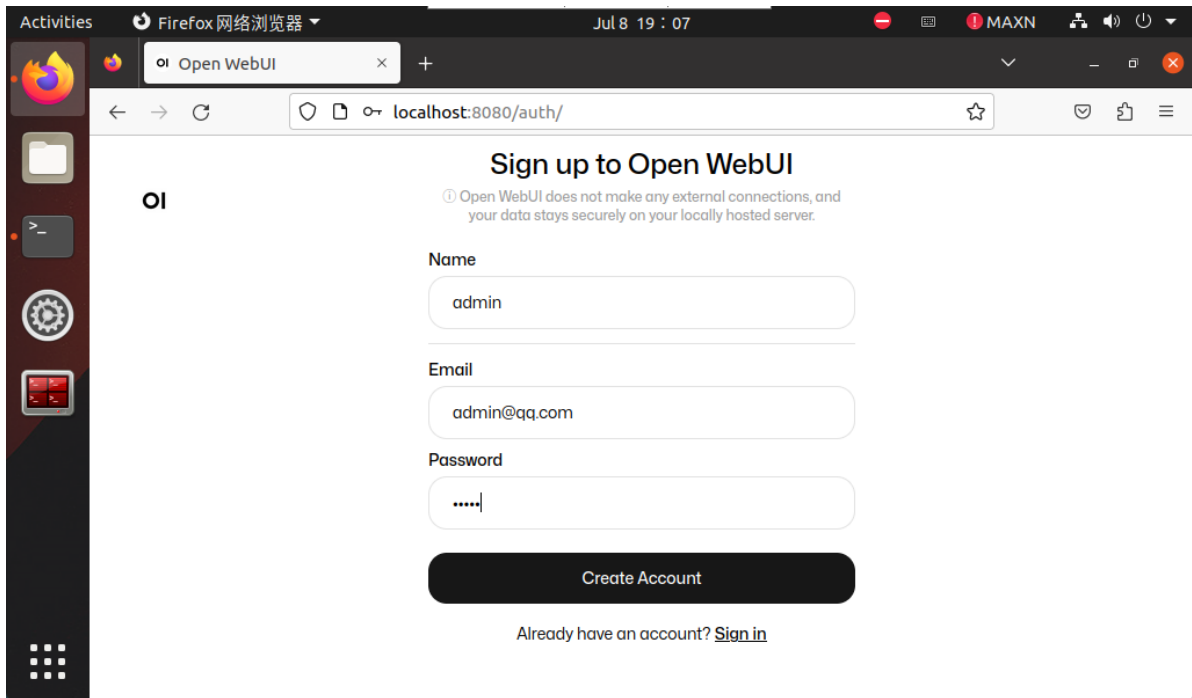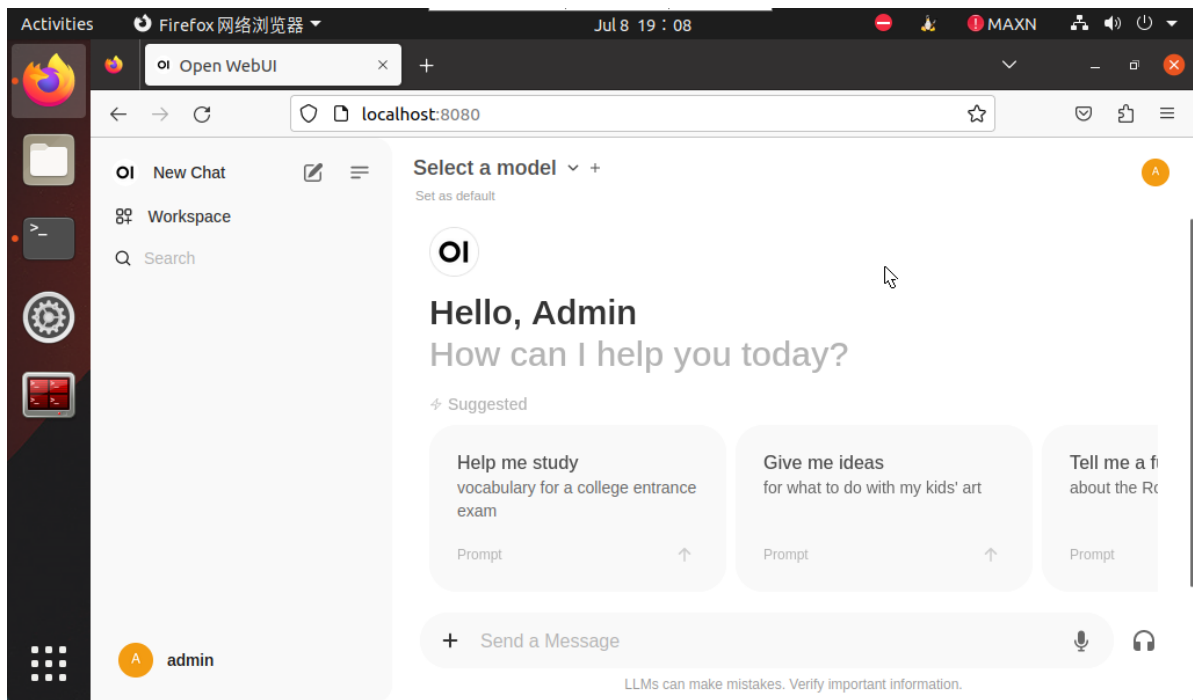
Register and log in

Since we have already registered: admin account, just log in directly!
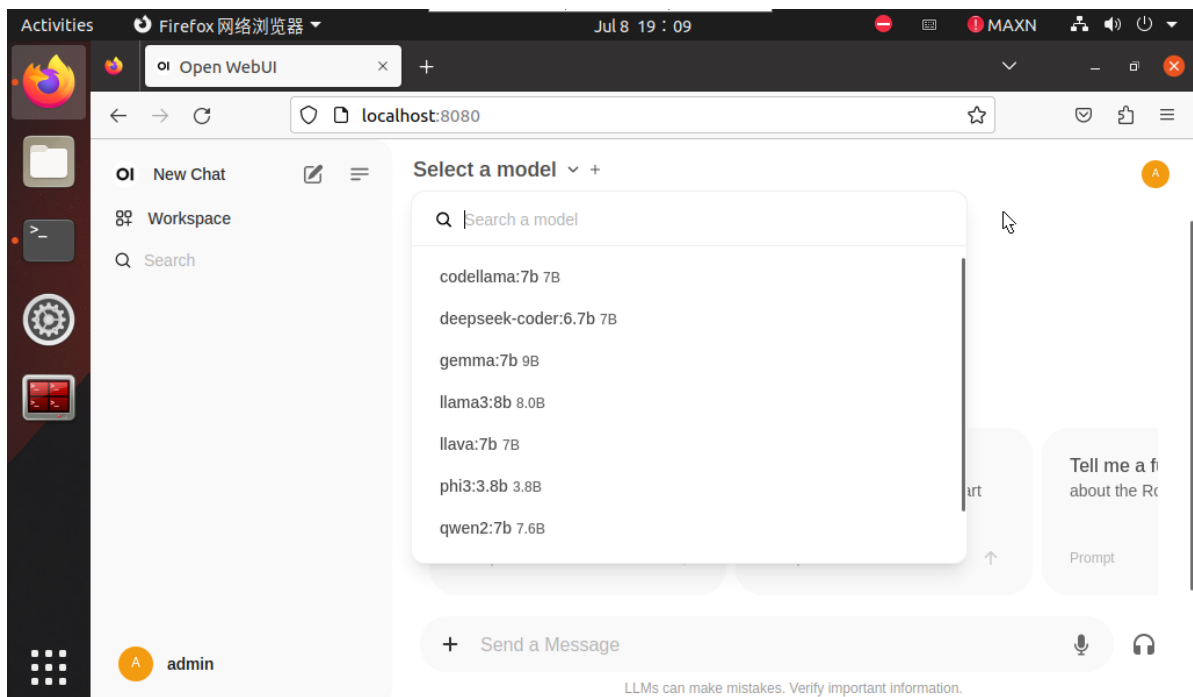
User interface

Model dialogue

Using Open WebUI for dialogue will be slower than using the Ollama tool directly, and may even cause timeout service connection failure. This is related to the memory of Jetson Nano and cannot be avoided!

```
Users with ideas can switch to other Linux environments to build Ollama tools and
Open WebUI tools for dialogue
```

Switch model

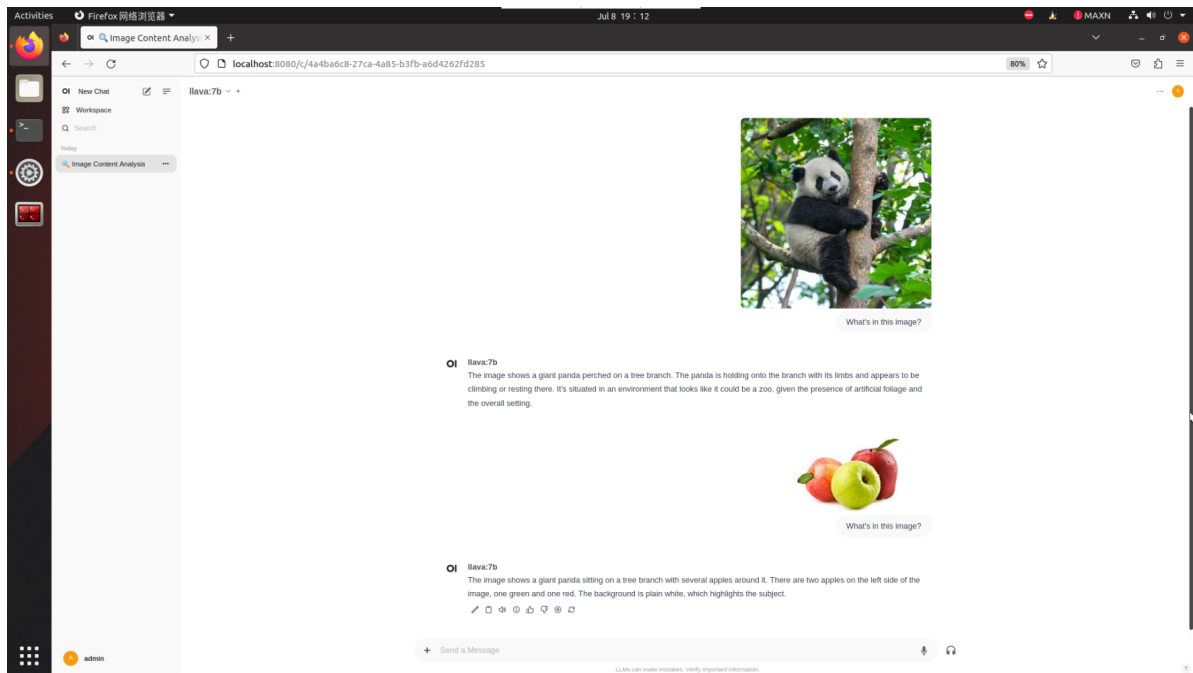Click `Select a model` to select a specific model for dialogue.

```
The model pulled using ollama will be automatically added to the Open WebUI model
option. Refresh the webpage and the new model will appear!
```

Demo: LLaVA

The LLaVA case demonstrated requires 8G or more to run. Users can use other cases to test the Open WebUI dialogue function!

```
What's in this image?
```


Frequently Asked Questions

Close Open WebUI

Close the self-starting Open WebUI.

- View running Docker

```
docker ps
```

- Shut down running Docker

```
docker stop [CONTAINER ID] # Example docker stop 5f42ee9cf784
```

- View stopped containers

```
docker ps -a
```

- Clean up stopped containers

```
docker rm [CONTAINER ID] # Example docker rm 5f42ee9cf784
```

Clean up all stopped containers:

```
docker container prune
```

Common Errors

Unable to start Open WebUI

- docker: Error response from daemon: Conflict. The container name "/open-webui" is already in use by container "cfc05c84f8e38b290337e7178c76fd1c49076f94b11ed3d49d9448be72b7f20f". You have to remove (or rename) that container to be able to reuse that name.

Solution: Close Open WebUI once and restart!

Service connection timeout

- Open WebUI: Server Connection Error

Close Open WebUI once and restart, then ask again or run the model with the Ollama tool to ask!