

# 安装步骤

- **1- 环境准备**

- 1.1 - 准备WSL2(Windows Subsystem for Linux)环境
- 1.2 - 安装环境依赖包（按照官方指南）
- 1.3 - 安装CUDA驱动（WSL用）

- **2- 安装facefusion**

- 2.1 下载facefusion源码
- 2.2 手动下载model
- 2.3 更改配置文件 (skip download)
- 2.4 安装facefusion（python install.py）
- 2.5 启动facefusion (python run.py)

# 本视频环境

- OS: Windows 11 + WSL2
- CPU : Core i5
- Memory: 32GB
- SSD: 1TB
- GPU: NVIDIA RTX4060

# 1.1 - 准备WSL环境

- 如果需要配置新的instance
  - `wsl -l -v`
  - `wsl --export <distro> <tar-file-location>`
  - `wsl --import <new-distro> <install location> <tar-file-location>`
  - `wsl -d <new-distro>`

## 1.1 - 准备WSL2环境

```
C:\Users\ [redacted] >wsl -l -v
```

NAME	STATE	VERSION
* Ubuntu	Stopped	2
Ubuntu-2	Stopped	2

```
C:\Users\ [redacted] >wsl --export ubuntu c:\wsl_images\ubutun_old.tar
```

Export in progress, this may take a few minutes.

The operation completed successfully.

```
C:\Users\ [redacted] \ubuntu-new>wsl --import ubuntu-new - c:\wsl_images\ubutun_old.tar
```

Import in progress, this may take a few minutes.

The operation completed successfully.

## 1.2 - 安装环境依赖包（按照官方指南）

- <https://docs.facefusion.io/installation>

# Linux

## Platform

### GIT

```
apt install git-all
```

### cURL

```
apt install curl
```

### Conda

```
curl -LO https://repo.anaconda.com/miniconda/Miniconda3-latest-Linux-x86_64.sh
```

```
bash Miniconda3-latest-Linux-x86_64.sh
```

### FFmpeg

```
apt install ffmpeg
```

### Codec

```
apt-get install mesa-va-drivers
```

# Linux

## Enviroment

### Installation

```
conda init --all
```

```
conda create --name facefusion python=3.10
```

### Usage

```
conda activate facefusion
```

# Linux

## Accelerator

### CUDA

```
conda install conda-forge::cuda-runtime=12.4.1 cudnn=8.9.2.26 conda-forge::gputil=1.4.0
```

### OpenVINO <sup>next</sup>

```
conda install conda-forge::openvino=2024.2.0
```

## 1.3 - 安装CUDA驱动 (WSL用)

- <https://docs.nvidia.com/cuda/wsl-user-guide/index.html#getting-started-with-cuda-on-wsl-2> (WSL2有专门的驱动)
- [https://developer.nvidia.com/cuda-11-8-0-download-archive?target\\_os=Linux&target\\_arch=x86\\_64&Distribution=WSL-Ubuntu&target\\_version=2.0&target\\_type=deb\\_local](https://developer.nvidia.com/cuda-11-8-0-download-archive?target_os=Linux&target_arch=x86_64&Distribution=WSL-Ubuntu&target_version=2.0&target_type=deb_local) (Download link)

### Download Installer for Linux WSL-Ubuntu 2.0 x86\_64

The base installer is available for download below.

#### > Base Installer

Installation Instructions:

```
$ wget https://developer.download.nvidia.com/compute/cuda/repos/wsl-ubuntu/x86_64/cuda-wsl-ubuntu.pin
$ sudo mv cuda-wsl-ubuntu.pin /etc/apt/preferences.d/cuda-repository-pin-600
$ wget https://developer.download.nvidia.com/compute/cuda/11.8.0/local_installers/cuda-repo-wsl-ubuntu-11-8-local_11.8.0-1_amd64.deb
$ sudo dpkg -i cuda-repo-wsl-ubuntu-11-8-local_11.8.0-1_amd64.deb
$ sudo cp /var/cuda-repo-wsl-ubuntu-11-8-local/cuda-*-keyring.gpg /usr/share/keyrings/
$ sudo apt-get update
$ sudo apt-get -y install cuda
```

## 2.1 下载facefusion源码

- git clone <https://github.com/facefusion/facefusion.git>



## 2.2 手动下载model

- <https://github.com/facefusion/facefusion-assets/releases> - 官方
- [https://drive.google.com/drive/u/1/folders/1R\\_1WKDgnxm2k3UHaOmC0FT8Bhx2f8SO7](https://drive.google.com/drive/u/1/folders/1R_1WKDgnxm2k3UHaOmC0FT8Bhx2f8SO7) (2.87GB) - 整合包

## 2.2 手动下载model

- 在facefusion目录下
  - mkdir .assets
  - mkdir .assets/models
  - cd .assets/models
  - cp /mnt/c/<location\_of\_models> .

## 2.2 手动下载model

```
(facefusion) models $ls -l
total 3287592
-rwxrwxrwx 1 root root 97904402 Jul 29 17:21 2dfan4.onnx
-rwxrwxrwx 1 root root 174383860 Jul 29 17:21 arcface_w600k_r50.onnx
-rwxrwxrwx 1 root root 1718947 Jul 29 17:21 clear_reality_x4.onnx
-rwxrwxrwx 1 root root 979790589 Jul 29 17:21 ddcolor.onnx
-rwxrwxrwx 1 root root 373359997 Jul 29 17:21 deoldify.onnx
-rwxrwxrwx 1 root root 944321 Jul 29 17:21 face_landmarker_5_68.onnx
-rwxrwxrwx 1 root root 944321 Jul 29 17:21 face_landmarker_68_5.onnx
-rwxrwxrwx 1 root root 70324403 Jul 29 17:21 face_occluder.onnx
-rwxrwxrwx 1 root root 53201152 Jul 29 17:21 face_parser.onnx
-rwxrwxrwx 1 root root 1322532 Jul 29 17:21 gender_age.onnx
-rwxrwxrwx 1 root root 340256690 Jul 29 17:21 gfpGAN_1.4.onnx
-rwxrwxrwx 1 root root 277680638 Jul 29 17:21 inswapper_128_fp16.onnx
-rwxrwxrwx 1 root root 66938051 Jul 29 17:21 lsdnet_x4.onnx
-rwxrwxrwx 1 root root 66938051 Jul 29 17:21 nomos8k_sc_x4.onnx
-rwxrwxrwx 1 root root 23590724 Jul 29 17:21 open_nsfw.onnx
-rwxrwxrwx 1 root root 36145927 Jul 29 17:21 real_esrgan_x2_fp16.onnx
-rwxrwxrwx 1 root root 69464831 Jul 29 17:21 real_esrgan_x4.onnx
-rwxrwxrwx 1 root root 3290207 Jul 29 17:21 scrfd_2.5g.onnx
-rwxrwxrwx 1 root root 1718947 Jul 29 17:21 span_kendata_4x.onnx
-rwxrwxrwx 1 root root 1718947 Jul 29 17:21 span_kendata_x4.onnx
-rwxrwxrwx 1 root root 66759214 Jul 29 17:21 voice_extractor.onnx
-rwxrwxrwx 1 root root 145175483 Jul 29 17:21 wav2lip_gan.onnx
-rwxrwxrwx 1 root root 12639351 Jul 29 17:21 yoloface_8n.onnx
-rwxrwxrwx 1 root root 232589 Jul 29 17:21 yunet_2023mar.onnx
```

用“ls -l”命令检查以下

1. 是不是model都在
2. 是不是权限是对的

## 2.3 更改配置文件 (skip download)

- 在facefusion目录下
  - 修改 facefusion.ini

```
[general]
source_paths =
target_path =
output_path =

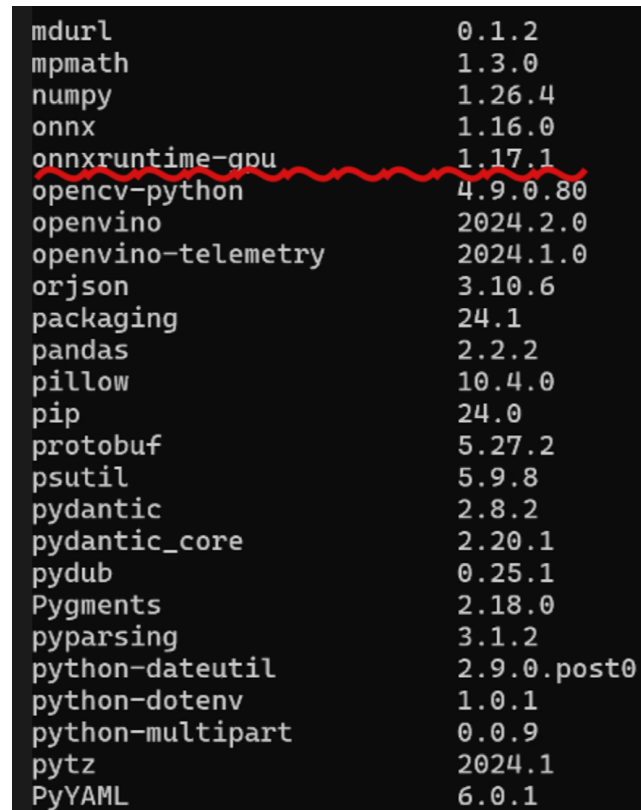
[misc]
force_download =
skip_download = True|
headless =
log_level =

[execution]
execution_device_id =
execution_providers =
execution_thread_count =
execution_queue_count =
```

目的是不用自动下载model  
(重要)

## 2.4 安装facefusion (python install.py)

- 在facefusion目录下
  - conda activate facefusion(如果需要)
  - python install.py
- 安装完后检查
  - pip list



```
mdurl 0.1.2
mpmath 1.3.0
numpy 1.26.4
onnx 1.16.0
onnxruntime-gpu 1.17.1
opencv-python 4.9.0.80
openvino 2024.2.0
openvino-telemetry 2024.1.0
orjson 3.10.6
packaging 24.1
pandas 2.2.2
pillow 10.4.0
pip 24.0
protobuf 5.27.2
psutil 5.9.8
pydantic 2.8.2
pydantic_core 2.20.1
pydub 0.25.1
Pygments 2.18.0
pyparsing 3.1.2
python-dateutil 2.9.0.post0
python-dotenv 1.0.1
python-multipart 0.0.9
pytz 2024.1
PyYAML 6.0.1
```

## 2.5 启动facefusion (python run.py)

- 在facefusion目录下
  - conda activate facefusion(如果需要)
  - python run.py

```
(facefusion) facefusion $python run.py  
Running on local URL:  http://127.0.0.1:7860  
|
```



localhost:7860

FaceFusion 2.6.1

DONATE

FRAME PROCESSORS

☒ face\_swapper

☐ face\_debugger

☐ face\_enhancer


☐ frame\_colorizer

☐ frame\_enhancer

☐ lip\_syncer

FACE SWAPPER MODEL

inswapper\_128\_fp16

 SOURCE

Drop File Here  
- or -  
Click to Upload

 TARGET

Drop File Here  
- or -  
Click to Upload

# 确认 (无明显错误 & 是cuda不是cpu在干活)

```
(facefusion) facefusion $python run.py
Running on local URL: http://127.0.0.1:7860
Analysing: 100%|=====
=====| 338/338 [00:01<00:00, 243.85frame/s, rate=0]
[FACEFUSION.CORE] Extracting frames with a resolution of 640x480 and 30.0 frames per second
[FACEFUSION.PROCESSORS.FRAME.MODULES.FACE_SWAPPER] Processing
Processing: 1%| | 4/338 [00:03<04:25, 1.26frame/s, execution_providers=['cpu'], execution_thread_count=4, execution_queue_count=1]
[FACEFUSION.CORE] Processing stopped
[FACEFUSION.CORE] Extracting frames with a resolution of 640x480 and 30.0 frames per second
[FACEFUSION.PROCESSORS.FRAME.MODULES.FACE_SWAPPER] Processing
Processing: 100%|=====| 338/338 [00:20<00:00, 16.33frame/s, execution_providers=['cuda'], execution_thread_count=4, execution_queue_count=1]
[FACEFUSION.CORE] Merging video with a resolution of 640x480 and 30.0 frames per second
[FACEFUSION.CORE] Processing to video succeed in 22.92 seconds
[FACEFUSION.CORE] Extracting frames with a resolution of 640x480 and 30.0 frames per second
[FACEFUSION.PROCESSORS.FRAME.MODULES.FACE_SWAPPER] Processing
Processing: 86%| | 290/338 [00:07<00:01, 38.65frame/s, execution_providers=['cuda'], execution_thread_count=4, execution_queue_count=1]
[FACEFUSION.CORE] Processing stopped
[FACEFUSION.CORE] Extracting frames with a resolution of 640x480 and 30.0 frames per second
[FACEFUSION.PROCESSORS.FRAME.MODULES.FACE_SWAPPER] Processing
Processing: 100%|=| 338/338 [00:14<00:00, 23.86frame/s, execution_providers=['cuda'], execution_thread_count=4, execution_queue_count=1]
[FACEFUSION.CORE] Merging video with a resolution of 640x480 and 30.0 frames per second
[FACEFUSION.CORE] Processing to video succeed in 16.52 seconds
```