

Dandere2x Installation and Usage (Windows)

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What is Dandere2x?

Dandere2x implements some elementary compression functions, such as interpolated frame compression as well as predictive frame compression to allow waifu2x to upscale videos faster. While results may vary, it is consistently faster when upscaling *most*¹ anime videos.

1 System Requirements

1. CUDNN compatible graphics card (i.e Nvidia)

2 Pre-Recs

2.1 Java

You will need java for this to run. One can test java is properly installed by typing into the command prompt, 'java -version' to ensure Java is properly running.

<https://www.wikihow.com/Install-the-Java-Software-Development-Kit>

If Java is not working, the program will not **run**.

2.2 Waifu2x-Caffe

You will need Waifu2x-Caffe with the CUDNN DLL working as well.

You can download this here

Waifu2xCaffe <https://github.com/lltcggie/waifu2x-caffe/releases/download/1.2.0.1/waifu2x-caffe.zip>

¹High movement frames can be slower when using Dandere2x, however, most of the time not.

Cudnn <https://developer.nvidia.com/rdp/form/cudnn-download-survey>

Found in the `bin` folder of the CUDNN download, place the `cudnn64_7.dll` into your `waifu2x-cafe` folder. You can verify your `waifu2x-Caffe` is working properly by pressing the "check cudnn" button within `waifu2x-cafe.exe` executable.

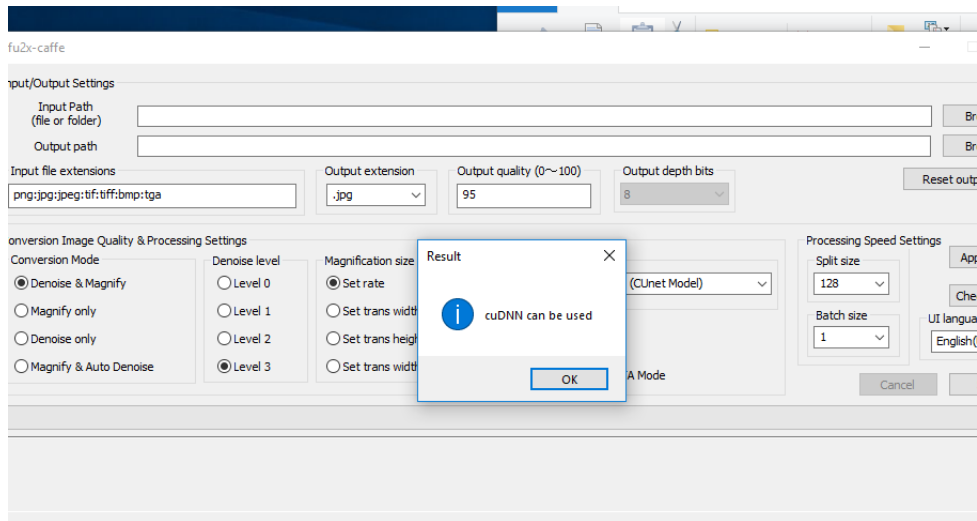


Figure: CUDNN working properly within *waifu2x-Caffe.exe*.

2.3 Dandere2x

Download Dandere2x and extract it somewhere.

<https://github.com/CardinalPanda/dandere2x/releases>

3 Pre-Setup

Open the folder you extracted dandere2x to. Inside there is a file named `config.txt`, whose contents vaguely resemble the following

```
#waifu2xstuff
waifu2xCaffeCUIDir=C:\\Users\\windwoz\\Desktop\\AllInOne\\waifu2x
    ↪ -caffe\\waifu2x-cafe-cui.exe

#file locations
workspace=C:\\Users\\windwoz\\Desktop\\yourname\\
fileDir=C:\\Video\\yn\\yn.mkv
```

```

frameRate=24

timeFrame=00:18:29
duration=00:02:00
audioLayer=0:1
dandere2xCppDir=danderecppmodule.exe

#customization
blockSize=30
tolerance=16
stepSize=8
noiseLevel=3
processType=cudnn

#ignore this if ur on windows
dandereDir=/home/linux/Documents/waifu2x/dandere.lua

    Replace waifu2xCaffeCUIDir with the absolute path if your waifu2x-caffee.
    cui.exe executable.
    YOU MUST INCLUDE two \ instead of instead just one \ or the code
    will not work.
    Valid:

waifu2xCaffeCUIDir=C:\\Users\\windwoz\\Desktop\\AllInOne\\waifu2x
    ↪ -caffe\\waifu2x-cafee-cui.exe

Invalid:

waifu2xCaffeCUIDir=C:\\Users\\windwoz\\Desktop\\AllInOne\\waifu2x-
    ↪ caffe\\waifu2x-cafee-cui.exe

```

4 Upscaling Video

Let us isolate the parts required to upscale a video

```

#wifu2xstuff
#file locations
workspace=C:\\Users\\windwoz\\Desktop\\yourname\\
fileDir=C:\\Video\\yn\\yn.mkv
frameRate=24

timeFrame=00:18:29
duration=00:02:00
audioLayer=0:1
dandere2xCppDir=danderecppmodule.exe

```

Create a folder somewhere which will act as your workspace. Remember to include two as well. Replace 'fileDir' with wherever your file is located. Framerate can be assumed to be 24, although videos may vary.

Timeframe and duration are intuitive.

When ready, double click **run.bat**. Doing so will start the scripts necessary for Dandere2x to upscale the video.

5 Runtime

Many processes open up after pressing **run.bat**, each performing various actions. You may monitor the progress, or click **log.txt** inside of the workspace folder to see what Dandere2x is doing. At the moment the commands are undeveloped.

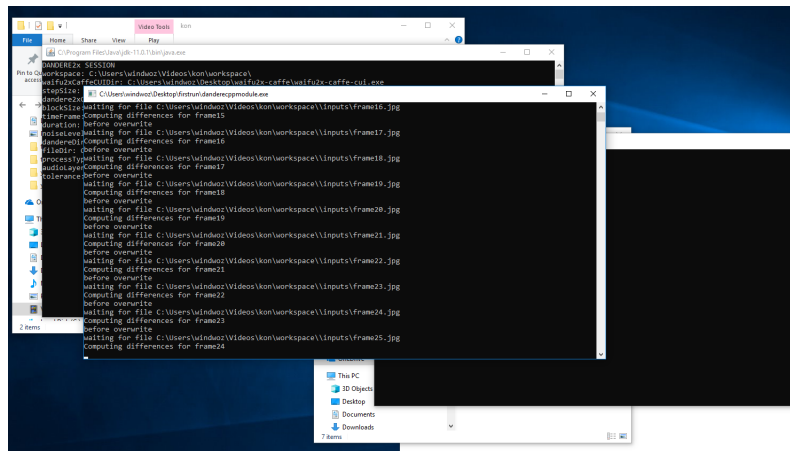


Figure: An example of what Dandere2x looks like when it is running.

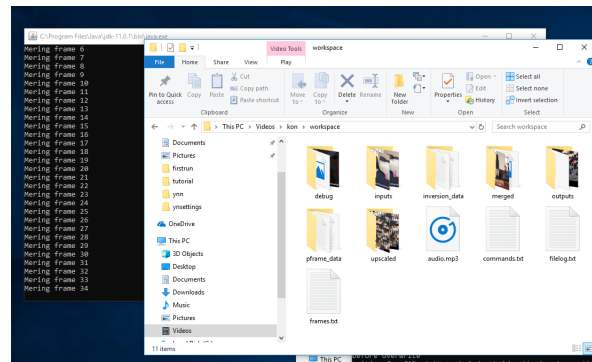


Figure: This picture shows what a workspace should look like.

There are various folders inside of the workspace folder. The most important is the ‘merged’ folder, as it is the final result. Keep an eye on this folder - if it stops upscaling but should be upscaling, Dandere2x may have crashed or had an error. I would recommend clearing the workspace or starting a new session.

This is a known glitch on windows. To fix it, close all the windows, delete the contents of the workplace folder, then run `run.bat` again. The origin of this bug is unknown.

6 Post Runtime

If Dandere2x successfully upscaled all the frames, check the `commands.txt` file. Inside, there are commands to merge your frames into an mp4 video. I do not recommend opening this file with notepad, WordPad or Atom or any other text editor would be better.