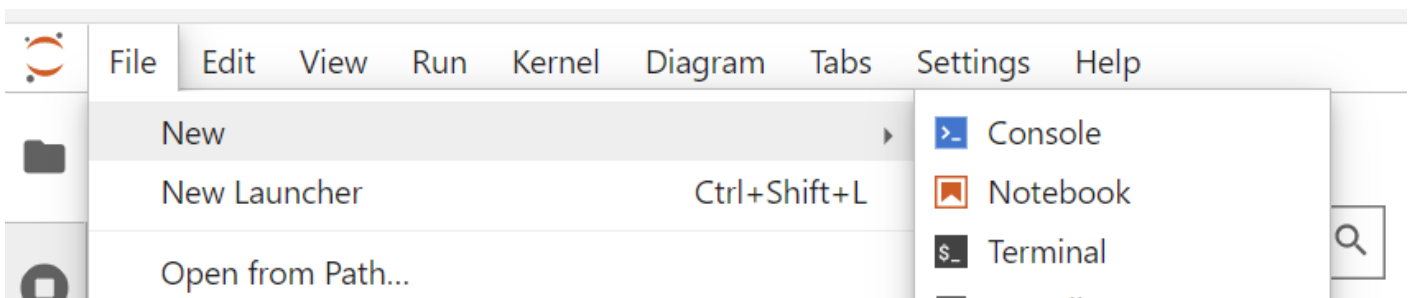


Installation: Stable Diffusion Web UI by Automatic1111 (+ Deforum Extension)

WebUI: Installation

1. Open a terminal



2. Run the following commands in terminal in this order:

Download the stable-diffusion-webui repository

```
git clone https://github.com/AUTOMATIC1111/stable-diffusion-webui.git
```

Change directory and navigate to the Stable Diffusion folder

```
cd stable-diffusion-webui/models/Stable-diffusion
```

3. Download a Stable Diffusion Model from [KISD Model Zoo](#)

Downloading ONE version is enough to get you started.

Stable Diffusion v-2-1 512x512 (base)

```
wget --no-check-certificate --content-disposition https://th-koeln.sciebo.de/s/Kpgz0TuejYcjY4t/download -O v2-1_512-ema-pruned.ckpt
```

Stable Diffusion v-2-1 768x768

```
wget --no-check-certificate --content-disposition https://th-koeln.sciebo.de/s/m3PhfQtImYOIEUI/download -O v2-1_768-ema-pruned.ckpt
```

4. Change access rights of file *webui.sh*

Return back to home directory

```
cd
```

Change directory and navigate to the stable-diffusion-webui folder

```
cd stable-diffusion-webui
```

Run this command to assign execution rights

```
chmod +x webui.sh
```

Optional: Install Deforum Extension

5. Run *webui.sh*

```
./webui.sh --share
```

6. In the terminal code, search for the `public URL` (Running on public URL: `https:// xxxxxxxx-xxxx-xxxx-.gradio.live`) and copy it to your browser

7. If you receive the following error message after trying to generate your first image, in the WebUI go to Settings > Stable Diffusion > & check the box for "Upcast cross attention layer to float" > Apply settings & Reload UI

NansException: A tensor with all NaNs was produced in Unet. This could be either because there's not enough precision to represent the picture, or because your video card does not

support half type. Try setting the "Upcast cross attention layer to float32" option in Settings > Stable Diffusion or using the --no-half commandline argument to fix this. Use --disable-nan-check commandline argument to disable this check.

The image shows the 'Stable Diffusion' settings page in the Automatic1111 web interface. On the left is a sidebar with navigation links: Training, Stable Diffusion (selected), Compatibility, Interrogate, Options, Extra Networks, User interface, Live previews, Sampler parameters, Postprocessing, Actions, and Licenses. Below these is a 'Show all pages' button. The main area displays various settings for the Stable Diffusion process. A slider for 'Noise multiplier for img2img' is at the top. Below it are several checkboxes: 'Apply color correction to img2img results to match original colors.', 'With img2img, do exactly the amount of steps the slider specifies (normally you'd do less with less denoising).', 'With img2img, fill image's transparent parts with this color.' (with a color picker), 'Enable quantization in K samplers for sharper and cleaner results. This may change existing seeds. Requires restart to apply.', 'Emphasis: use (text) to make model pay more attention to text and [text] to make it pay less attention', and 'Make K-diffusion samplers produce same images in a batch as when making a single image'. There is also a slider for 'Increase coherency by padding from the last comma within n tokens when using more than 75 tokens' and a 'Clip skip' slider. At the bottom, the 'Upcast cross attention layer to float32' checkbox is checked and highlighted with a yellow background.

8. At end of use: Within the interface, go to File > Hub Control Panel > Stop My Server

Deformum Extention (Animation for SD): Installation

1. Open a terminal & navigate to the stable-diffusion-webui folder

```
cd stable-diffusion-webui
```

2. Download the Deformum repository

```
git clone https://github.com/deforum-art/deforum-for-automatic1111-webui/ extensions/deforum
```

Tutorial recommendation: [Deformum Settings Explained - Part 1 Stable Diffusion Automatic 1111](#)

After Installation: Running Stable Diffusion WebUI

1. Open a terminal & navigate to the stable-diffusion-webui folder

```
cd stable-diffusion-webui
```

2. Run *webui.sh*

```
./webui.sh --share
```

3. In the terminal code, search for the `public URL` (Running on public URL: `https:// xxxxxxxx-xxxx-xxxx-.gradio.live`) and copy it to your browser

4. At end of use: Within the interface, go to File > Hub Control Panel > Stop My Server

Tutorial recommendation: [Stable diffusion tutorial. ULTIMATE guide - everything you need to know!](#)

Please Note: The original version of this book was created by Laura Wagner. This is merely an update of her work!