

```
import torch
from diffusers import StableDiffusionInpaintPipeline
from PIL import Image
import requests
import numpy as np
```

The cache for model files in Transformers v4.22.0 has been updated. Migrating your old cache. This is a one-time only operation. You can interrupt this and resume the migration later on by calling ``transformers.utils.move_cache()``.

```
{"model_id": "81d8b2dd36df40b3a7f1987ea8e8445e", "version_major": 2, "version_minor": 0}
```

Load the pre-trained inpainting model

```
device = "cuda" if torch.cuda.is_available() else "cpu"
pipe = StableDiffusionInpaintPipeline.from_pretrained(
    "runwayml/stable-diffusion-inpainting",
    torch_dtype=torch.float16 if device == "cuda" else torch.float32
).to(device)
```

```
/usr/local/lib/python3.11/dist-packages/huggingface_hub/utils/_auth.py:94: UserWarning:
```

The secret ``HF_TOKEN`` does not exist in your Colab secrets. To authenticate with the Hugging Face Hub, create a token in your settings tab (<https://huggingface.co/settings/tokens>), set it as secret in your Google Colab and restart your session. You will be able to reuse this secret in all of your notebooks. Please note that authentication is recommended but still optional to access public models or datasets.

```
warnings.warn(
```

```
{"model_id": "a37dabf54ed841b99caea03dbae57f62", "version_major": 2, "version_minor": 0}
```

```
{"model_id": "0fedce2400cf4898b421e6d8ecc8295a", "version_major": 2, "version_minor": 0}
```

```
{"model_id": "8efb36d20b324cb3995bbfd33ff27bfc", "version_major": 2, "version_minor": 0}
```

```
{"model_id": "3d7997d7a1374ecbb957c852ef65b014", "version_major": 2, "version_minor": 0}
```

```
{"model_id": "532fd591927443319882d6b6d474bdc3", "version_major": 2, "version_minor": 0}
```

```
{"model_id": "369593075fcc4824951d96a4fd52f472", "version_major": 2, "version_minor": 0}
```

```
{"model_id": "a475e9f34951487bbf365dedf35431fe", "version_major": 2, "version_minor": 0}
```

```
{"model_id":"f4a3988cc1664b0db58efd68255f721a","version_major":2,"version_minor":0}

{"model_id":"2347b5095e5543c68f9bf17aaa05fb12","version_major":2,"version_minor":0}

{"model_id":"24b3777ab8ac415b8a3488622a48c82a","version_major":2,"version_minor":0}

{"model_id":"6777875d48564b4782030b30d5e69fdc","version_major":2,"version_minor":0}

{"model_id":"c893cfe49ed04ffcae5404965d2d8137","version_major":2,"version_minor":0}

{"model_id":"e277525c02e14d80b473c6e1b912e695","version_major":2,"version_minor":0}

{"model_id":"a2e2e2a72d644317bc46f5ea8ebcc91b","version_major":2,"version_minor":0}

{"model_id":"d469708fef3a4be4b6a56e2bcaf1ba7c","version_major":2,"version_minor":0}

{"model_id":"56d7df9c69f6435f88f653e53e62ef85","version_major":2,"version_minor":0}

{"model_id":"1de65ea08d714ba380196447e615f477","version_major":2,"version_minor":0}
```

An error occurred while trying to fetch
/root/.cache/huggingface/hub/models--runwayml--stable-diffusion-inpainting/snapshots/8a4288a76071f7280aedbdb3253bdb9e9d5d84bb/vae:
Error no file named diffusion_pytorch_model.safetensors found in directory /root/.cache/huggingface/hub/models--runwayml--stable-diffusion-inpainting/snapshots/8a4288a76071f7280aedbdb3253bdb9e9d5d84bb/vae.
Defaulting to unsafe serialization. Pass `allow_pickle=False` to raise an error instead.

An error occurred while trying to fetch
/root/.cache/huggingface/hub/models--runwayml--stable-diffusion-inpainting/snapshots/8a4288a76071f7280aedbdb3253bdb9e9d5d84bb/unet:
Error no file named diffusion_pytorch_model.safetensors found in directory /root/.cache/huggingface/hub/models--runwayml--stable-diffusion-inpainting/snapshots/8a4288a76071f7280aedbdb3253bdb9e9d5d84bb/unet.
Defaulting to unsafe serialization. Pass `allow_pickle=False` to raise an error instead.

```
# Load input image and mask
def load_image(path):
    # Use PIL's Image.open directly for local files
```

```
    return Image.open(path).convert("RGB")

image_url = "/content/Generative_fill2.jpg" # Provide your own image
mask_url = "/content/car.jpg" # Provide a binary mask (white = keep,
black = fill)

image = load_image(image_url)
mask = load_image(mask_url)

# Run the inpainting model
output = pipe(prompt="Fill the missing part realistically",
image=image, mask_image=mask).images[0]

# Save and display the result
output.save("output_filled.png")
output.show()

{"model_id": "3102c07897d042b690093ce2f505e7fc", "version_major": 2, "version_minor": 0}
```